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DRAFT
ENVIRONMENTAL IMPACT REPORT
#2001031067

REMEDIATION OF THE
FORMER GUN RANGE WITHIN
HUNTINGTON CENTRAL PARK

Lead Agency:

CITY OF HUNTINGTON BEACH

2000 Main Street

Huntington Beach, CA 92648

Contact: Mr. Ricky Ramos, Associate Planner
(714) 536-5271

Consultant:

RBF CONSULTING

14725 Alton Parkway

Irvine, CA 92618

Contact: Mr. Kevin Thomas, Environmental Services Manager
(949) 855-3659

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I.0 EXECUTIVE SUMMARY

1.1 PROJECT SUMMARY

Existing Conditions

The proposed project site exists within the central portion of the City of Huntington Beach. The site is located east of Goldenwest Street, west of Gothard Street, north of Ellis Avenue, and south of Talbert Avenue. The proposed project site is a former gun range practice facility used by the Huntington Beach Police Officers Association until its closure in 1997. The site was operated by the County of Orange as part of a landfill until 1962 when it was converted into a gun range. Currently, on-site improvements include a small, elevated rangemaster's office, a small restroom facility, two office trailers, a covered row of firing stations, and a large storage shed. Wooden posts surround the entire facility and also partition the firing range into three separate areas. Surrounding land uses include the Central Park Sports Complex (under construction) to the north and west, public and open space uses to the north, light industrial, commercial, and public uses to the east, and open space and residential to the south.

Proposed Project

The proposed project involves the remediation of the 4.91-acre former gun range site. Remediation would require the removal of structures, wood posting, soil, sand, and asphalt in order to remove lead contamination resulting from over 20 years of use as a Huntington Beach Police Officers Association (HBPOA) firing range.

Subsequent to remediation, the subject site is proposed to become an open space/park element of the 356.8 acre Huntington Central Park Master Plan, which encompasses the project site. On-site improvements are anticipated to consist of facilities typical of open space/park uses, possibly including parking areas, restrooms/concession structures, irrigation, lighting, and various utilities. Implementation of the proposed project will be consistent with the City of Huntington Beach General Plan, Zoning and Subdivision Ordinance, and policies contained within the Huntington Central Park Master EIR.

1.2 ENVIRONMENTAL SUMMARY

Refer to the following summary of project impacts, mitigation measures, and unavoidable significant impacts.

IMPACT	MITIGATION MEASURE
4.1 PUBLIC HEALTH AND SAFETY	
REMEDIATION HAZARDS <i>The proposed project would result in hazards to nearby sensitive uses during the short-term remedial process.</i> Significance: Less than significant with mitigation.	<p>PHS-1 Prior to excavation of the contaminated and other areas for rough grading, the project site shall be cleared of all excess vegetation, surface trash, piping, debris and other deleterious materials. These materials shall be removed and disposed of properly (recycled if possible).</p> <p>PHS-2 Unless underground utility locations are well documented, as determined by the City of</p>

IMPACT	MITIGATION MEASURE
	<p>Huntington Beach Public Works Department, the contractor shall perform geophysical surveys prior to excavations to identify subsurface utilities and structures. Pipelines or conduits which may be encountered within the excavation and graded areas shall either be relocated or be cut and plugged according to the applicable code requirements.</p> <p>PHS-3 Proper excavation procedures shall be followed to comply with OSHA's Safety and Health Standards. If applicable, the South Coast Air Quality Management District (SCAQMD) Rule 1166 permit shall be obtained prior to the commencement of excavation and remedial activities.</p> <p>PHS-4 The contractor shall follow all recommendations contained within the adopted Remedial Action Plan for the project site.</p> <p>PHS-5 If asbestos or lead-based paints are identified in any on-site structures, the contractor shall obtain a qualified contractor to survey the project site and assess the potential hazard. The contractor shall contact the SCAQMD and the City of Huntington Beach prior to asbestos/lead paint removal.</p> <p>PHS-6 Prior to initiating the removal of structures and contaminated materials, the contractor must provide evidence that the removal of materials will be subject to a traffic control plan, as approved by the City Engineer. The intent of this measure is to minimize the time period and disruption of heavy duty trucks.</p> <p>PHS-7 If any hazardous materials not previously addressed in the mitigation measures contained herein are identified and/or released to the environment at any point during the site cleanup process, operations in that area shall cease immediately. At the earliest possible time, the contractor shall notify the City of any such findings. Upon notification of the appropriate agencies, a course of action will be determined subject to the approval of the City Manager.</p> <p>PHS-8 All structures must be cleaned of hazardous materials prior to off-site transportation, or hauled off-site as a waste in accordance with applicable regulations.</p> <p>PHS-9 Structure removal operations shall comply with all regulations and standards of the SCAQMD.</p> <p>PHS-10 The contractor shall post signs prior to</p>

IMPACT	MITIGATION MEASURE
	<p>commencing remediation, alerting the public to the site cleanup operations in progress. The size, wording and placement of these signs shall be reviewed and approved by the City Planning Department.</p> <p>PHS-11 Any unrecorded or unknown wells uncovered during the excavation or grading process shall be immediately reported to and coordinated with the City and DOGGR.</p>
<p>LANDFILL GAS HAZARDS</p> <p><i>Project implementation would subject on-site and surrounding uses to hazards in regards to landfill gas generation and migration. Significance: Less than significant with mitigation.</i></p>	<p>PHS-12 All lead-impacted soils to be screened/treated and then reused on-site shall be tested prior to reuse to ensure compliance with all local, state, and federal specifications.</p> <p>PHS-13 Prior to the issuance of building permits for reuse of the subject site, the City shall perform appropriate studies to evaluate the potential for landfill gas generation and migration. If deemed necessary, an active landfill gas extraction system designed for the adjacent Sports Complex will be modified and expanded to extract landfill gas from the subject site. Appropriate mitigation measures will be coordinated with the SCAQMD, OCHCA, SARWQCB, and the City of Huntington Beach Fire Department.</p> <p>PHS-14 A comprehensive landfill gas monitoring network shall be implemented around the perimeter of the subject site. Periodic monitoring of the monitoring network and at locations above the surface of the site will be performed.</p> <p>PHS-15 The City shall implement a cover system on areas of the site to be irrigated to control moisture infiltration into refuse beneath the site. A suitable cover system could consist of a synthetic geomembrane, geotextile fabric for protection of geomembrane and filtering for the drainage layer, a drainage layer, and a vegetation layer or an approved alternative.</p> <p>PHS-16 The contractor shall coordinate with the County of Orange's Integrated Waste Management Department in order to ensure that the proposed project does not impact drainage of the former landfill situated beneath the project site.</p>
4.2 LAND USE/RELEVANT PLANNING	
<p>LAND USE</p> <p><i>Implementation of the proposed project would have both short-term and long-term impacts in regards to land use compatibility. Significance: Less than significant.</i></p>	<p>None required. However, refer to mitigation measures contained in Section 4.1 (Public Health and Safety), Section 4.4 (Air), and Section 4.5 (Noise).</p>

IMPACT	MITIGATION MEASURE
<p>RELEVANT PLANNING</p> <p><i>The proposed project will be consistent with the City of Huntington Beach General Plan, Zoning and Subdivision Ordinance, and Huntington Central Park Master EIR, and does not propose to change any General Plan or Zoning designations. Significance: No Impact.</i></p>	<p>None required.</p>
<p>4.3 GEOLOGY AND SOILS</p>	
<p>WIND/WATER EROSION</p> <p><i>Implementation of the proposed project would create adverse impacts in regards to wind and water erosion. Significance: Less than significant with mitigation.</i></p>	<p>GEO-1 Concurrent with the submittal of the Grading Plan, the Applicant shall submit an Erosion Control Plan to the City of Huntington Beach Department of Public Works which will include the following measures:</p> <ul style="list-style-type: none"> a) Where necessary, temporary and/or permanent erosion control devices, as approved by the Department of Public Works, shall be employed to control erosion and provide safety during the rainy season from October 15th to April 15th. Such devices will be designed to avoid infiltration of rainwater and/or surface water into the underlying refuse materials. b) Equipment and workers for emergency work shall be made available at all times during the rainy season. Necessary materials shall be available on-site and stockpiled at convenient locations to facilitate the rapid construction of temporary devices when rain is imminent. c) Erosion control devices shall not be moved or modified without the approval of the Department of Public Works. d) All removable erosion protective devices shall be in place at the end of each working day when the 5-day rain probability forecast exceeds 40%. e) After a rainstorm, all silt and debris shall be removed from streets, check berms and basins. f) Graded areas on the permitted area perimeter must drain away from the face of the slopes at the conclusion of each working day. Drainage is to be directed toward desilting facilities. g) The permittee and contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded water creates a hazardous condition. Impoundment areas designed to receive surface water runoff shall be adequately lined in order to prevent infiltration of collected water into underlying refuse.

IMPACT	MITIGATION MEASURE
	<p>h) The permittee and contractor shall inspect the erosion control work and ensure that the work is in accordance with the approved plans.</p> <p>i) Water shall be applied to the site twice daily during grading operations or as otherwise directed by the County of Orange Inspector in compliance with South Coast AQMD rule 403 (Fugitive Dust Emissions). A grading operations plan may be required including watering procedures to minimize dust, and equipment procedures to minimize vehicle emissions from grading equipment.</p> <p>GEO-2 Remediation and construction shall include Best Management Practices (BMPs) as stated in the Drainage Area Management Plan (DAMP) by the Orange County Stormwater Management Program. BMPs applicable to the project include the following:</p> <ul style="list-style-type: none"> ❖ Potential pollutants include but are not limited to: solid or liquid chemical spills; wastes from paints, stains, sealants, glues, limes, pesticides, herbicides, wood preservatives and solvents; asbestos fibers, paint flakes, or stucco fragments; fuels, oils, lubricants, and hydraulic, radiator, or battery fluids; fertilizers, vehicle/equipment wash water and concrete wash water; concrete, detergent, or floatable wastes; wastes from any engine/equipment steam cleanings or chemical degreasing; and superchlorinated potable water line flushings. ❖ During remediation/construction, disposal of such materials should occur in a specified and controlled temporary area on-site, physically separated from potential stormwater run-off, with ultimate disposal in accordance with local, state, and federal requirements. <p>GEO-3 As part of its compliance with the NPDES requirements, the Applicant shall prepare a Notice of Intent (NOI) to be submitted to the Santa Ana Regional Water Quality Control Board providing notification and intent to comply with the State of California general permit. Prior to remediation/construction, completion of a Storm Water Pollution Prevention Plan (SWPPP) will be required for remediation/construction activities on-site. The SWPPP shall incorporate BMPs as found in the Orange County NPDES Stormwater Program DAMP, and shall also include BMPs to contain lead-impacted soils on-site and halt excavation/remediation activities during a rain event, including export of soils off-site. A</p>

IMPACT	MITIGATION MEASURE
	copy of the SWPPP shall be available and implemented at the construction site at all times.
TOPOGRAPHY <i>No significant landform impacts are anticipated, as the existing project area is relatively flat and contains no unique geological or physical features. Significance: Less than significant.</i>	None required.
GEOLOGY/SOILS <i>Unstable geologic conditions beneath the subject site may create hazardous conditions for short-term remediation/construction and long-term reuse. Significance: Less than significant with mitigation.</i>	<p>GEO-4 A detailed geotechnical report shall be prepared and submitted with the building permit application for the proposed facilities/structures. This analysis shall incorporate the findings of the Remedial Action Plan and will include on-site soil sampling and laboratory testing of materials to provide detailed recommendations regarding grading, foundations, retaining walls, overexcavation/recompaction, and chemical/fill properties of underground items including buried pipe and concrete and protection thereof. The reports shall specifically address lateral spreading and liquefaction potential. The geotechnical report shall also be submitted to the Department of Public Works for review and approval in conjunction with the grading plan. Appropriate recommendations regarding soil stabilization for structural loads associated with potential subsidence hazards shall be provided to mitigate potentially adverse conditions. Typical methods include, but are not limited to:</p> <ul style="list-style-type: none"> ❖ pre-loading areas where structures are planned to reduce the elastic component of the refuse settlement; ❖ in-situ improvement of the upper portions of the refuse through the use of dynamic compaction; and ❖ include a synthetic reinforcement material in the cover soil layer to create a stiff layer of soils capable of supporting structures and tending to distribute the effects of differential settlement. <p>GEO-5 In conjunction with the submittal of application for preliminary or precise grading permits, the City shall ensure that the geotechnical report recommendations have been incorporated into the grading plan unless otherwise specified in the geotechnical report and/or by the City Engineer.</p> <p>GEO-6 Prior to interim or long-term facility construction, the City shall ensure that the preliminary geotechnical report recommendations have been incorporated into the grading plan unless otherwise</p>

IMPACT	MITIGATION MEASURE
	specified in the geotechnical report and/or by the City Engineer.
<p>SEISMICITY/FAULTING</p> <p><i>The project area is subject to seismic activity, and may be subject to hazards in regards to seismicity/faulting. Significance: Less than significant with mitigation.</i></p>	<p>GEO-7 Due to the potential for ground shaking in a seismic event, the project shall comply with the standards set forth in the UBC (most recent edition) to assure seismic safety to the satisfaction of the Department of Building and Safety prior to issuance of a building permit, including compliance with California Division of Mines and Geology Special Publication 117 (Guidelines for Evaluating and Mitigating Seismic Hazards in California, adopted March 13, 1997).</p>
<p>LIQUEFACTION</p> <p><i>The proposed project may be subject to liquefaction hazards. Significance: Less than significant.</i></p>	None required.
<p>LANDFILL GAS</p> <p><i>Decomposing refuse underlying the subject site may create hazards to on-site and surrounding uses in regards to landfill gas. Significance: Less than significant with mitigation.</i></p>	Refer to Mitigation Measures PHS-12 through PHS-16, above.
4.4 AIR QUALITY	
<p>SHORT-TERM EMISSIONS</p> <p><i>Short-term remediation/construction processes for the proposed project would have short-term air quality impacts. Significance: Less than significant with mitigation.</i></p>	<p>AIR-1 Prior to the issuance of grading permits or approval of grading plans, the City shall include a dust control plan as part of the construction contract standard specifications, which shall include measures to meet the requirements of the City and SCAQMD Rules 402 and 403. Such measures may include, but are not limited to, the following:</p> <p>During grading operations, the following shall be complied with:</p> <ul style="list-style-type: none"> ❖ Attempt to phase and schedule activities to avoid high-ozone days and first-stage smog alerts; ❖ Discontinue operation during second-stage smog alerts; ❖ All haul trucks shall be covered prior to leaving the site to prevent dust from impacting the surrounding areas; ❖ Comply with AQMD Rule 403, particularly to minimize fugitive dust and noise to surrounding areas; ❖ Moisten soil each day prior to commencing grading to depth of soil cut; ❖ Water exposed surfaces at least twice a day under calm conditions and as often as needed on windy days when winds are less than 25 mile per day or during very

IMPACT	MITIGATION MEASURE
	<p>dry weather in order to maintain a surface crust and prevent the release of visible emissions from the construction site;</p> <ul style="list-style-type: none"> ❖ Treat any area that will be exposed for extended periods with a soil conditioner to stabilize soil or temporarily plant with vegetation; ❖ Wash mud-covered tires and undercarriages of trucks leaving construction sites; ❖ Provide for street sweeping, as needed, on adjacent roadways to remove dirt dropped by construction vehicles or mud which would otherwise be carried off by trucks departing project sites; ❖ Securely cover all loads of fill coming to the site with a tight fitting tarp; ❖ Cease grading during periods when winds exceed 25 miles per hour; ❖ Maintain construction equipment in peak operating condition so as to reduce operating emissions; ❖ Use low-sulfur diesel fuel in all equipment; ❖ Use electric equipment whenever practicable; and ❖ Shut off engines when not in use.
<p>LONG-TERM EMISSIONS</p> <p><i>The proposed project would create long-term air quality emissions impacts through on-site stationary, off-site mobile, and off-site energy-related emissions. Significance: Less than significant.</i></p>	<p>None required.</p>
<p>CONSISTENCY WITH REGIONAL PLANS</p> <p><i>Air quality emissions and related impacts for the proposed project have been accounted for both regionally and locally. Significance: Less than significant.</i></p>	<p>None required.</p>
<p>SENSITIVE RECEPTORS</p> <p><i>The proposed project may impact sensitive receptors surrounding the project site in regards to air quality. Significance: Less than significant.</i></p>	<p>None required. Refer to <i>SHORT-TERM EMISSIONS</i>, above, for a summary of mitigation measures for short-term remediation/construction related impacts.</p>
4.5 NOISE	
<p>SHORT-TERM CONSTRUCTION</p> <p><i>The proposed project may have short-term remediation/construction related noise impacts on surrounding sensitive receptors. Significance: Less than significant with mitigation.</i></p>	<p>NOI-1 Prior to the issuance of any grading permits, the City shall ensure evidence acceptable to the City of Huntington Beach Departments of Planning and Public Works that:</p> <ul style="list-style-type: none"> ❖ All construction vehicles or equipment, fixed or mobile, operated

IMPACT	MITIGATION MEASURE
	<p>within 1,000 feet of a dwelling shall be equipped with properly operating and maintained mufflers.</p> <ul style="list-style-type: none"> ❖ All operations shall comply with the City of Huntington Beach Municipal Code Chapter 8.40 (Noise Control). ❖ Stockpiling and/or vehicle staging areas shall be located as far as practicable from residential areas. ❖ Notations in the above format, appropriately numbered and included with other notations on the front sheet of grading plans, will be considered as adequate evidence of compliance with this condition. <p>NOI-2 Should the project require off-site import/export of fill material during remediation/construction, trucks shall utilize a route that is least disruptive to sensitive receptors, preferably Gothard to Talbert to Beach to I-405. Construction trucks shall be prohibited from operating on Saturdays, Sundays, and federal holidays.</p> <p>NOI-3 To reduce project-related construction noise impacts generated by the proposed project, the following conditions shall be implemented:</p> <ul style="list-style-type: none"> ❖ Construction activities shall be limited to hours specified by the City Noise Ordinance; and ❖ Unnecessary idling of internal combustion engines shall be prohibited.
<p>LONG-TERM STATIONARY SOURCES</p> <p><i>The proposed project may have long-term stationary noise impacts on surrounding sensitive receptors. Significance: Less than significant with mitigation.</i></p>	<p>None required.</p>
<p>MOBILE SOURCES</p> <p><i>Traffic generated by the proposed project may have long-term mobile noise impacts on surrounding sensitive receptors. Significance: Less than significant.</i></p>	<p>None required.</p>
<p>4.6 PUBLIC SERVICES AND UTILITIES</p>	
<p>FIRE SERVICE</p> <p><i>The proposed project could increase demand for fire and emergency services within the City. Significance: Less than significant with mitigation.</i></p>	<p>PSU-1 If necessary, the City of Huntington Beach will coordinate with the County of Orange to provide permanent right-of-entry emergency access through County property for the proposed project.</p>
<p>POLICE SERVICE</p> <p><i>The proposed project is not anticipated to create a</i></p>	<p>None required.</p>

IMPACT	MITIGATION MEASURE
<p><i>significant increase in service calls to the project vicinity nor is it expected to create a need for additional police facilities within the City. Significance: Less than significant.</i></p>	
<p>SCHOOLS</p> <p><i>The proposed project may place additional demand on schools located within the vicinity of the project area. Significance: Less than significant with mitigation.</i></p>	<p>None required.</p>
<p>LIBRARIES</p> <p><i>The proposed project may increase demand on the City's library system. Significance: Less than significant.</i></p>	<p>None required.</p>
<p>ROADWAY MAINTENANCE</p> <p><i>Additional traffic generated by the proposed project may increase demand on streets nearby the project site. Significance: Less than significant.</i></p>	<p>None required.</p>
<p>PARKS AND RECREATION</p> <p><i>The project may increase demand on park facilities within the vicinity of the project area. Significance: Less than significant.</i></p>	<p>None required.</p>
<p>WASTEWATER</p> <p><i>Implementation of the proposed project could increase demand on the local wastewater system. Significance: Less than significant.</i></p>	<p>None required.</p>
<p>DRAINAGE</p> <p><i>The proposed project may increase demand on the local storm water drainage system. Significance: Less than significant impact with mitigation.</i></p>	<p>PSU-2 Prior to the issuance of grading or building permits, the City of Huntington Beach will require that the project is designed such that there are no substantial increases in the rate and amount of surface runoff. Incidental drainage will be routed off of the site to existing storm drains.</p>
<p>WATER</p> <p><i>The proposed project may increase demand on the local water supply system. Significance: Less than significant with mitigation.</i></p>	<p>PSU-3 If the Green Acres Project is not yet operational and able to supply water to the proposed project prior to the development of final plans and specifications, additional studies will be undertaken to determine the extent to which one or a combination of the following measures will be necessary to reduce impacts to water supply systems for program level elements during the interim until water from the Green Acres Project is available:</p> <ul style="list-style-type: none"> ❖ Reduce the required irrigable areas by 10 percent;

IMPACT	MITIGATION MEASURE
	<ul style="list-style-type: none"> ❖ Enhance the utilization of existing groundwater systems (i.e., subpotable wells); or ❖ Supplement the irrigation supply with water from the domestic water system.
<p>SOLID WASTE</p> <p><i>Project implementation may increase the generation of solid waste, thereby increasing demand on solid waste disposal facilities within the vicinity. Significance: Less than significant with mitigation.</i></p>	<p>PSU-4 Prior to initiating site demolition or remediation activities, the City will prepare a waste reduction plan for the generation of construction and demolition waste from the proposed project. This plan should involve the recycling coordinator from the City of Huntington Beach to help ensure that AB 939 requirements are properly addressed.</p>
<p>ELECTRICITY</p> <p><i>The proposed project may create impacts in regards to increased electricity demand. Significance: Less than significant with mitigation.</i></p>	<p>PSU-5 Prior to the construction of program level elements, additional electrical load analyses shall be undertaken to determine the need for additional electrical transformers.</p>
<p>GAS</p> <p><i>Existing gas facilities in and surrounding the project area are capable of accommodating additional demand resulting from the proposed project. Significance: Less than significant.</i></p>	<p>None required.</p>
<p>TELEPHONE AND CABLE</p> <p><i>Existing telephone and cable facilities in and surrounding the project area are capable of accommodating additional demand resulting from the proposed project. Significance: Less than significant.</i></p>	<p>None required.</p>
<p>4.7 AESTHETICS/LIGHT & GLARE</p>	
<p>CONSTRUCTION RELATED IMPACTS</p> <p><i>Project-related construction may adversely impact views of and across the proposed project site through debris, equipment, and truck traffic. Significance: Less than significant.</i></p>	<p>None required.</p>
<p>SITE CHARACTER</p> <p><i>The long-term reuse of the site may alter the aesthetic character of the project area. Significance: Less than significant with mitigation.</i></p>	<p>AES-1 For areas visible by existing or proposed residential areas, exterior mechanical equipment shall be screened from view on all sides, and rooftop mechanical equipment shall be setback 15 feet from the exterior edges of the building. Equipment to be screened includes, but is not limited to, heating, air conditioning, refrigeration equipment, plumbing lines, ductwork and transformers. Said screening shall be architecturally compatible with the building in terms of materials and colors. If screening is not designed specifically into the building, a</p>

IMPACT	MITIGATION MEASURE
	rooftop mechanical equipment plan showing screening must be submitted for review and approval with the application for building permit(s).
LIGHT AND GLARE <i>The proposed project may generate light and glare through on-site nighttime security lighting. Significance: Less than significant with mitigation.</i>	AES-2 If outdoor lighting is included, light intensity shall be limited to that necessary for adequate security and safety. All outside lighting shall be directed to prevent "spillage" onto adjacent properties and shall be shown on the site plan and elevations.

UNAVOIDABLE SIGNIFICANT IMPACTS

The proposed project may have an unavoidable significant impact in regards to short-term, remediation/construction related NO_x emissions. However, pollutant emissions from hauling vehicles would be dispersed over a large geographical area and would be short-term in nature. No other unavoidable significant impacts have been identified for the proposed project.

1.3 SUMMARY OF PROJECT ALTERNATIVES

The following is a summary of project alternatives described in Section 7.0, *ALTERNATIVES TO THE PROJECT*, which contains a more detailed discussion. Significant impacts to be reduced or avoided include land use, traffic, aesthetics, biological, geological noise, air quality, water quality and recreation. The primary proposed project objective is to remediate the subject site and subsequently incorporate it as an open space/park element of the existing Huntington Central Park.

"NO DEVELOPMENT" ALTERNATIVE

None of the impacts associated with the proposed development and construction activities would occur if the "No Development" alternative were selected. Implementation of this alternative would leave the existing abandoned gun range facility in place, and would avoid any adverse physical or environmental impacts associated with the proposed project. Existing geologic, soils, and aesthetic conditions in the area would remain the same. Air quality and noise impacts due to building and park construction and increased traffic would not occur with the "No Development" alternative. However, this alternative would not meet the basic project objectives to remediate and implement an open space/park facility on-site.

"INTERIM USE" ALTERNATIVE

The "interim use" alternative would involve a temporary use on-site after the site has been remediated until a long-term open space/park facility is established. Possible interim uses would be consistent with City designations for the site, which include an "Open Space-Park (OS-P)" designation by the General Plan and "Open Space-Parks and Recreation (OS-PR)" by the Zoning and Subdivision Ordinance. Based on the large number of possible interim uses for the subject site, it is difficult to present a well-defined "Interim Use" alternative. Potential impacts resulting from the various project implementation scenarios vary greatly from one another. Please see Section 6.0,

ALTERNATIVES TO THE PROJECT, for more detailed discussion.

“RELOCATION OF HANSON RECYCLING CENTER” ALTERNATIVE

This alternative involves the relocation of Hanson Aggregates West, Inc. Huntington Beach Recycling Center (located adjacently northeast of the subject site) onto a portion of the former gun range after remediation is complete. The Hanson Recycling Center is a 2.8-acre facility that recycles broken concrete and asphalt solid waste and processes it into road base material. The facility receives an average of 30 trucks per day. A portable rock crusher is brought on-site twice a year, for three to four weeks each use. The existing Hanson facility is currently located within the boundaries of Huntington Central Park. Because the subject site is designated “Open Space-Park (OS-P)” by the City’s General Plan and “Open Space-Parks and Recreation (OS-PR)” by the Zoning and Subdivision Ordinance, the Hanson Recycling Center Relocation would be an “interim” use until long-term open space/park facilities are implemented on-site as designated by the City of Huntington Beach General Plan. This alternative would generally have similar environmental impacts as the proposed project in regards to land use/relevant planning, air quality, noise, and aesthetics/light and glare. Impacts in regards to public health and safety and geology and soils may be elevated, as implementation of an aggregate facility on-site may accelerate local differential settlement of the underlying landfill and/or accelerate landfill gas migration.

“ALTERNATIVE USE” ALTERNATIVE

The “Alternative Use” alternative would not be a feasible alternative, primarily due to the site’s previous use as a landfill operated by the County of Orange until the 1960’s and the City’s desire to maintain the site as open space in the long-term. Subsidence caused by decomposing landfill is currently evident at the former gun range site. Costly and time-consuming amounts of preparation would be necessary for the site to support significant large buildings or structures requiring a solid foundational pad. In addition, this alternative would require a General Plan amendment and zoning change, as the subject site is currently designated “Open Space-Park (OS-P)” by the City’s General Plan and “Open Space – Parks and Recreation (OS-PR)” by the Zoning and Subdivision Ordinance.

“ALTERNATIVE SITE” ALTERNATIVE

The “Alternative Site” for this project would not be applicable. As stated in Section 4.4, *PROJECT OBJECTIVES*, the remediation of the former gun range facility is a basic objective of the proposed project. On-site contamination, consisting primarily of lead, zinc, and copper, poses a serious health threat to the surrounding community. The selection of an alternative site would void the purpose of the project, and therefore is not feasible.

“ALTERNATIVE PROJECT DESIGNS”

There are two alternatives for site remediation, although the feasible solutions are relatively limited due to the site’s size and nature of contamination (discussed in Section 4.1, *PUBLIC HEALTH AND SAFETY*). Any alternative design for remedial operations would most likely result in similar impacts to the proposed project. In regards to reuse of the subject site, the City has yet to select a specific long-term recreational use, and, as such, any alternative project design for reuse would be subject to separate discretionary and environmental review.

“ENVIRONMENTALLY SUPERIOR” ALTERNATIVE

None of the above alternatives are considered “environmentally superior” to the proposed project. The “No Project” alternative would minimize environmental impacts but would pose significant health risks to the surrounding community by leaving the former gun range contaminated, and would not

implement the City's General Plan and Zoning for the site. Many of the "Interim Use" alternative land uses would have the same range of impacts as the proposed project, while higher intensity recreational uses would most likely have greater impacts than the proposed project. The "Relocation of the Hanson Recycling Center" alternative would likely result in generally similar impacts as the proposed project. Under this alternative, the Hanson facility would be shifted slightly (approximately 200 feet) to the southwest of its previous long-term location (where it had existed for about 20 years). When considering ambient noise in the site vicinity and the intervening Sports Complex between the subject site and the Ocean View Mobile Home Park, this alternative would be comparable in impacts to the proposed project. Hanson's would be aesthetically screened and would be required to maintain lower piles of aggregate. In addition, prevailing winds in the vicinity tend to carry noise and dust to the north, away from the mobile home park. However, impacts in regards to public health and safety and geology and soils may be elevated, as implementation of an aggregate facility on-site may accelerate local differential settlement of the underlying landfill and/or accelerate landfill gas migration. An "Alternative Use" would not be consistent with General Plan and zoning designations, and would create public health and safety concerns due to landfill gas, settlement, and site contamination hazards. "Alternative Project Design" options are relatively limited due to the site's size and nature of contamination, and any such alternative design would most likely result in similar impacts to the proposed project.

1.4 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

None have been identified as of publication of the Draft EIR. Refer to Section 5 for a discussion of environmental impact issues.

2.0 INTRODUCTION AND PURPOSE

2.1 PURPOSE OF THE EIR

The purpose of this Draft Environmental Impact Report (EIR) is to review the existing conditions, analyze potential environmental impacts and suggest feasible mitigation measures to reduce significant adverse environmental effects for the proposed "Remediation of the Former Gun Range within Huntington Central Park" project (unless otherwise noted, "project" refers to remediation of the former gun range site). This document identifies the potential environmental impacts of the proposed project, including temporary construction-related effects and long-term effects associated with project buildout.

It is the intent of this EIR to avoid or minimize the need for future environmental documentation for the project by utilizing the most current and detailed plans, technical studies and related information available. For more detailed information regarding the proposed development, refer to Section 3.0, *PROJECT DESCRIPTION*.

This EIR will be used by the City of Huntington Beach and other responsible agencies and interested parties to evaluate the environmental impacts of the proposed project (refer to Section 3.7, *AGREEMENTS, PERMITS AND APPROVALS*, for a list of responsible agencies and project approvals).

2.2 COMPLIANCE WITH CEQA

This EIR has been prepared in conformance with the California Environmental Quality Act (CEQA) Statutes (as amended through January, 2002) and the CEQA Guidelines, particularly California Code of Regulations, Article 9, Section 15120 through 15132 (content of an EIR). As an EIR, this document will serve as the comprehensive compliance with the California Environmental Quality Act pursuant to CEQA Guidelines. This EIR evaluates the issues and impacts identified as significant in the Initial Study, in addition to issues identified in the course of project research and in the Notice of Preparation responses (see Appendix A, *INITIAL STUDY/NOP*).

The City of Huntington Beach determined that the project may result in significant adverse effects and therefore requires an EIR. This determination was based on the Initial Study and a preliminary review of available project information. As part of the review process, the Draft EIR is subject to a 45-day public review period by responsible and concerned agencies and interested parties. Following this period, responses to comments received from these agencies will be prepared. The Final EIR will consist of the Draft EIR or a revision of the draft, as well as comments received on the Draft EIR and the responses to these comments.

2.3 SCOPE OF THE EIR

An Initial Study was completed for the proposed project by the City of Huntington Beach on March 15, 2001, to determine the potential environmental impacts of the project. The Notice of Preparation (NOP) was distributed by the City of Huntington Beach on March 15, 2001. The comment period closed on April 13, 2001, following the state mandated 30-day Notice of

Preparation review period (refer to Appendix A, NOP/Initial Study).

This EIR addresses potential significant impacts in the following areas, as identified in the Initial Study. Additionally, the EIR includes relevant issues raised throughout the EIR preparation process. Issues discussed within this EIR are as follows:

1. Public Health and Safety
2. Land Use/Relevant Planning
3. Geology and Soils
4. Air Quality
5. Noise
6. Aesthetics/Light and Glare
7. Public Services and Utilities
8. Additional CEQA-mandated discussion (alternatives, growth, cumulative impacts)

The Draft EIR is organized into 9 sections:

- ~ Section 1.0, *EXECUTIVE SUMMARY*, provides a brief project description and summary of the environmental impacts, and the mitigation measures for each impact.
- ~ Section 2.0, *INTRODUCTION AND PURPOSE*, provides CEQA compliance information.
- ~ Section 3.0, *PROJECT DESCRIPTION*, provides a project location, environmental setting, background and history, project characteristics, project objectives, phasing, agreements and approvals which are required for the project.
- ~ Section 4.0, *ENVIRONMENTAL ANALYSIS*, discusses the existing conditions for each environmental issue area. This section will describe the methodology for significance determination and identifies short-term and long-term environmental impacts associated with the project and their level of significance before mitigation, recommends feasible mitigation measures to reduce the significance of impacts, and identifies areas of unavoidable significant impacts after mitigation.
- ~ Section 5.0, *LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT*, discusses the significant environmental changes that would be involved in the proposed action, should it be implemented; growth-inducing impacts; and cumulative impacts associated with General Plan buildout and concurrent surrounding projects.
- ~ Section 6.0, *ALTERNATIVES TO THE PROPOSED ACTION*, describes alternatives to the project, some of which may be considered during project deliberations.
- ~ Section 7.0, *EFFECTS FOUND NOT TO BE SIGNIFICANT*, provides an explanation of potential impacts which have been determined not to be significant in the Initial Study checklist.
- ~ Section 8.0, *ORGANIZATIONS AND PERSONS CONSULTED*, identifies the lead agency, preparers of the EIR, all federal, state and local agencies and other organizations and individuals consulted during the preparation of the EIR.
- ~ Section 9.0, *BIBLIOGRAPHY*, identifies reference sources utilized for the EIR.

~ Section 10.0, *APPENDICES*.

2.4 USE OF THE EIR

This EIR is part of the environmental review process for the Remediation of the Former Gun Range within Huntington Central Park project. It is the intent of this EIR to enable the City of Huntington Beach and other responsible agencies and interested parties to evaluate the environmental impacts of the proposed gun range reuse project. (Please refer to Section 3.7, *AGREEMENTS, PERMITS AND APPROVALS*, for a list of responsible agencies having approval authority over the project.) This EIR suggests measures to mitigate potential significant impacts of the proposed project.

2.5 DOCUMENTATION INCORPORATED BY REFERENCE

Pertinent documents relating to this EIR have been cited and incorporated, in accordance with §15148 and 15150 of the CEQA Guidelines, to eliminate the need for inclusion of voluminous engineering and technical reports within this environmental document. This EIR incorporates the following documents by reference, which are available for review at the City of Huntington Beach Planning Department (located at 2000 Main Street, Huntington Beach, California):

City of Huntington Beach General Plan EIR, 1995

This document addresses the potential environmental impacts associated with implementation of the City of Huntington Beach Draft General Plan. The purpose of this EIR is to identify the Draft General Plan's significant effects on the environment, to indicate the manner in which significant effects can be mitigated or avoided, and to identify alternatives to the proposed project which could avoid or reduce these impacts. The document also provides objective planning and environmental information for the City of Huntington Beach.

City of Huntington Beach General Plan, 1996

The General Plan for the City of Huntington Beach is a policy planning document which provides the framework for management and utilization of the City's physical, economic and human resources. This document guides civic decisions regarding land use, the design and/or character of buildings and open spaces, the conservation of existing housing and the provision of new dwelling units, the provisions of supporting infrastructure and public services, the protection of environmental resources, the allocation of fiscal resources, and the protection of residents from natural and human-caused hazards.

Final Master Environmental Impact Report for Master Plan of Recreation Uses for Central Park, City of Huntington Beach, California, 1999

The Draft Master Environmental Impact Report for Master Plan of Recreation Uses for Central Park assesses the environmental consequences of the *Master Plan of Recreation Uses for Huntington Central Park*. This Master EIR is intended to serve as an informational document regarding the objectives and components of the proposed project and potential environmental impacts, and to describe mitigation measures and reasonable alternatives to the project. Environmental review for the gun range site within this Master EIR is performed at a Program level.

2.6 TECHNICAL REFERENCES

In accordance with CEQA Guidelines Section 15148, this EIR cites appropriate technical studies and reference documents, as indicated throughout the EIR and listed in Section 9, *BIBLIOGRAPHY*. These technical studies are available for review at the City of Huntington Beach Planning Department located at 2000 Main Street, Huntington Beach, California.

3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The Huntington Central Park former gun range site is approximately 4.91 acres in size and is located in the central portion of the City of Huntington Beach. The City of Huntington Beach is a coastal city along the Pacific Ocean in northwestern Orange County. It is surrounded by Westminster to the north, Fountain Valley to the northeast, Costa Mesa and Newport Beach to the east, and Seal Beach to the west. Los Angeles is located approximately 35 miles to the northwest while San Diego is 95 miles to the southeast.

Regional access is via the Interstate 405 (I-405) Freeway to the north, Beach Boulevard to the east, and Pacific Coast Highway to the south (refer to Exhibit 1, *REGIONAL VICINITY MAP*). Local streets surrounding the project site include Goldenwest Street to the west, Gothard Street to the east, Talbert Avenue to the north, and Ellis Avenue to the south (refer to Exhibit 2, *SITE VICINITY MAP*). The proposed project site is a former gun range practice facility used by the Huntington Beach Police Officers Association and general public. The site is bordered by the Central Park Sports Complex (under construction) to the north and west, Sully Miller Lake to the south, the Hanson Recycling Center to the northeast, and the former Orange County Transfer Station (also known as the Orange County Gothard Street Refuse Disposal Station) to the east (refer to Exhibit 3, *AERIAL PHOTO*).

3.2 ENVIRONMENTAL SETTING

The 4.91-acre gun range site was originally owned by the County of Orange as part of a County-operated landfill, which closed in the 1960's. The current gun range improvements were constructed over this landfill but the facility was closed in 1997 due to unstable soil caused by decomposing landfill waste. Due to the former landfill and gun range activities, the site represents a public health and safety hazard due to potential landfill gas migration as well as surface contamination. On-site vegetation consists mainly of non-native low-lying shrubs and bushes throughout the project site. The topography of the site is relatively flat, gently sloping to the southwest, with an elevation of approximately 50 feet above mean sea level (msl).

Existing on-site structures include a small, elevated rangemaster's office, a small restroom facility, two office trailers, a covered row of firing stations, and a large storage shed. Wooden posts approximately 20-feet tall surround the entire facility and also partition the firing range into three separate areas (main firing range, pistol range, and sniper/special forces training area). A six to eight foot berm composed of sand and dirt used as target backing rest along the northern border of the facility for a length of approximately 250 feet. Asphalt paving is present along the entry driveway and the staging area for the main gun range. In addition, two rows of metal and wooden targets are present in an east/west configuration across the floor of the main firing range. Since its closure the site has been overgrown by a variety of vegetation.

Surrounding Land Uses. Surrounding adjacent land uses include the Central Park Sports Complex (under construction) to the north and west, Sully Miller Lake to the south, the Orange County Transfer Station to the east, and the Hanson Aggregates West Inc. Huntington Beach Recycling Center to the northeast. Further land uses surrounding the proposed project site include: Talbert

Avenue, Huntington Central Park, and Huntington Central Library to the north; Goldenwest Street, a disc golf course, and equestrian center to the west; Ellis Avenue, residential, light industrial, and public uses to the south; and Gothard Street and light industrial/commercial uses to the east.

Land Use/Planning. The City of Huntington Beach General Plan designates the Central Park Gun Range as “Open Space - Park.” This designation is intended to preserve open spaces that provide, maintain, and protect significant environmental resources, recreational opportunities, and visual relief from development for the City’s existing and future residents. The City envisions that the gun range area will be incorporated into Huntington Central Park in the future. The project site is zoned as “Open Space - Parks and Recreation” (OS-PR). This district provides areas for public or private use and areas for preservation and enhancement.

3.3 BACKGROUND AND HISTORY

PREVIOUS USE OF THE SITE

The proposed project site was originally owned by the County of Orange and was used as part of the County’s Gothard Street Refuse Disposal Station. The former landfill was divided into two distinct areas consisting of 33.2 acres of mixed municipal refuse and 18.3 acres of construction demolition material. The subject site reportedly overlies a portion of the mixed municipal waste area of the landfill. The County operated the landfill as a burning dump from September 1947 through September 1956. After that date, the landfill was operated as a cut and cover facility. Approximately 1.1 million cubic yards of refuse was deposited into the landfill prior to its closure.¹ When the landfill closed in 1962, the County deeded the property to the City of Huntington Beach for public park and recreational uses. The Huntington Beach Police Officers Association then utilized the site to construct the current gun range improvements and operated the facility under a 20-year lease from the City. The lease expired in 1988 and was continued on a year to year basis. In the early 1990’s, it became evident that unstable soil caused by decomposing landfill material would require improvements to the gun range facility. In 1997 it was determined that costs to improve the site exceeded available funds. The City of Huntington Beach then terminated the lease and closed the facility.

CURRENT PROJECT

Beginning in 1998, the City of Huntington Beach began considering remediation of the former gun range facility to allow development of the site with recreational uses, consistent with the Huntington Central Park concept. The City retained RBF Consulting in 2000 to assist in preparing the EIR and Remedial Action Plan. On March 15, 2001 the City completed an Initial Study and distributed the Notice of Preparation (NOP). These documents, as well as public comments in response to the NOP, are provided in Appendix A.

¹

Draft Alternatives for Huntington Beach Landfill. Kleinfelder, Inc., May 2, 1990.

EXHIBIT 1 REGIONAL VICINITY MAP

EXHIBIT 2 SITE VICINITY MAP

EXHIBIT 3 - AERIAL PHOTO

3.4 PROJECT CHARACTERISTICS

The project addressed in this EIR consists of two major elements: 1) the remediation of the former gun range facility; and 2) the development of interim and/or long-term recreational/open space uses. Each of these elements is discussed further below.

SITE REMEDIATION

Remedial Alternatives

The proposed project involves the remediation and reuse of the 4.91-acre former gun range site located within the jurisdictional boundaries of the City of Huntington Beach. In order to initiate project remediation, a Remedial Action Plan (RAP), prepared by Hart Crowser, Inc., was approved by the Orange County Health Care Agency (OCHCA) on November 15, 2002. The OCHCA is the lead agency for approval of the RAP.

On-site sampling performed by Hart Crowser, Inc., on March 12, 13, and 14, 2001, indicated that extensive lead and soluble lead contamination exist throughout the subject site boundaries. Under Title 22 of the California Code of Regulations (CCR), the following thresholds for on-site lead contamination were exceeded:

- ~ The first criteria is referred to as the Total Threshold Limit Concentration (TTLC) and is defined as 1,000 mg/kg for lead. Wastes (solids) having lead concentrations above the TTLC are by definition considered hazardous. It should be noted that the OCHCA (lead agency for RAP approval) also utilizes the United States Environmental Protection Agency (USEPA) Region 9 Industrial Preliminary Remediation Goal (PRG) for lead of 750 mg/kg.
- ~ The second criteria is referred to as the Soluble Threshold Limit Concentration (STLC). The STLC regulates the amount of hazardous substance that can be present in a dilute solution of citric acid repeatedly passed through the waste in a procedure defined as the Waste Extraction Test (WET). The WET is intended to simulate conditions found in landfills where decaying vegetation produces weak acidic solutions that can leach metals and carry them to groundwater. The STLC for lead is 5.0 mg/L. If the WET leachate from a sample is analyzed to contain higher than 5.0 mg/L, by definition it is considered hazardous and must be disposed of according to applicable regulations.

The objective of project implementation is to remediate lead and soluble lead to levels below the TTLC and STLC established by the State of California. In order to meet this objective, the Remedial Action Plan examined several possible lead remediation alternatives. The following is a brief summary of RAP alternatives, of which one or a combination of several will ultimately be selected for the project (refer to Appendix B, *REMEDIATION DOCUMENTATION*, for a detailed summary of each alternative):

- ~ **RAP Alternative 1 - No Action**

The “no-action” alternative leaves the subject property in its current condition with no remedial treatment actions, no affected soil removals, or capping. There are no specific remedial technologies or process options included under this “no-action” category. The subject site would continue to pose a significant health risk due to lead contamination. This action serves as a baseline against which the effectiveness of other remedial technology action alternatives can be measured.

~ **RAP Alternative 2 - Limited Excavation of the Bermed Area and “Hot Spots,” and Limited Asphalt Capping (Recommended Alternative)**

This alternative entails the excavation of the bermed area and “hot spots” which present lead concentrations higher than the USEPA PRG of 750 mg/kg. Under this option it is estimated that approximately 7,333 tons of soil would require excavation. Limited asphalt capping would cover only those areas where excavation were to occur (bermed area and “hot spot” area), for a total of approximately 24,000 square feet of asphalt capping area. It should be noted that asphalt capping is not necessary to meet remediation requirements, but has been proposed in order to provide the City more flexibility in choosing a reuse (given the instability of the underlying landfill). Assuming implementation of the recommended remedial option for soil remediation (described below), this option would result in approximately 250 truck trips for soil/ wood post fencing disposal and asphalt capping.² Trucks would utilize Gothard Street to Talbert Avenue to Beach Boulevard to I-405 for hauling. It should be noted that this Alternative is the “recommended remedial option” within the RAP.

~ **RAP Alternative 3 - Limited Excavation of the Bermed Area and “Hot Spots,” and Complete Asphalt Capping**

This remedial alternative would include all aspects of Alternative 2, but would consist of complete asphalt capping of the entire project site (approximately 114,000 square feet of capping) instead of limited capping. As stated above, it should be noted that asphalt capping is not necessary to meet remediation requirements, but has been proposed in order to provide the City more flexibility in choosing a reuse (given the instability of the underlying landfill). Assuming implementation of the recommended remedial option for soil remediation (described below), this option would result in approximately 342 truck trips for soil/wood post fencing disposal and asphalt capping.³ Trucks would utilize Gothard Street to Talbert Avenue to Beach Boulevard to I-405 for hauling.

² Assumes 1,466.6 tons of soil (113 truck trips at 13 tons per truck), 2,241 cubic yards of wooden posting (113 truck trips at 12 cubic yards per truck), and 293 cubic yards of asphalt (24 truck trips at 12 cubic yards per truck) will be transported on/off-site.

³ Assumes 1,466.6 tons of soil (113 truck trips at 13 tons per truck), 2,241 cubic yards of wooden posting (187 truck trips at 12 cubic yards per truck), and 1,393 cubic yards of asphalt (116 truck trips at 12 cubic yards per truck) will be transported on/off-site.

It should be noted that Alternatives 2 and 3 involve the treatment of lead-impacted soils which can be treated and disposed of by different methods. Potential methods for the soil remediation components for Alternatives 2 and 3 include:

~ **Option 1 - Off-Site Disposal (California Hazardous)**

Lead-impacted soils would be excavated and transported off-site for proper disposal by licensed trucks to a licensed landfill. This option assumes that the affected soil is classified as a California Hazardous Waste (California Hazardous Wastes are non-RCRA, state-regulated wastes). Engineered fill material would be imported, placed, and compacted to a minimum of 90 percent of maximum dry density in accordance with American Society of Testing Materials (ASTM) D1557 standard. Grading is based on the movement of no more than six inches of material over the proposed grading area, and is intended to promote positive drainage. Additional cut and fill (grading) may be necessary depending on actual final grading plans developed for specific future use(s). As these future use(s) and associated grading details are not known and may vary, they were not addressed in the RAP or this EIR.

~ **Option 2 - On-Site Screening, Partial Reuse, and Off-Site Disposal (California Hazardous)**

Lead-impacted soils would be excavated and placed in stockpiles for screening (utilizing "state-of-the-art" stacked pneumatic screening technology) in an effort to separate larger lead fragments from the soil. The fragments would be sent to a recycling facility for reuse. The finer grained materials would either be transported off-site as a California Hazardous Waste or reused as backfill material. Backfill, compaction, and grading procedures would be similar to those of Option 1.

~ **Option 3 - On-Site Screening, Partial Reuse, and Off-Site Disposal (RCRA Hazardous)**

Remediation operations would be similar to those in Option 2, above. However, lead-impacted soils transported off-site would be classified as Resource Conservation Recovery Act (RCRA) Hazardous Waste (RCRA wastes are regulated by the federal government). Backfill, compaction, and grading procedures would be similar to those of Option 1.

~ **Option 4 - Off-Site Recycle and Landfill (California Hazardous)**

Lead-impacted soils would be excavated and loaded into licensed trucks for off-site shipment to a licensed landfill for proper disposal. This material would be classified as a California Hazardous Waste. Backfill, compaction, and grading procedures would be similar to those of Option 1.

~ **Option 5 - On-Site Treatment, Full/Partial Reuse, and Possible Off-Site Disposal (California Hazardous)**

Prior to any on-site treatment, a bench scale treatability test (a small-scale simulation of the treatment process using a small quantity of waste) would be conducted to determine an appropriate mix design for the specified treatment process. A variety of mix designs would be evaluated, and a treatability report would be prepared to describe methods to achieve favorable treatment results below regulatory thresholds. Lead-impacted soils would be screened in a fashion similar to Option 2. Subsequent to the screening process, each excavated area would be sampled for lead analysis. Results may indicate that some or all areas of the site may not require further treatment. A post-screening Risk Assessment analysis would then be prepared, indicating which areas of the site may need further remediation. Additionally, the Risk Assessment can be used for obtaining overall cleanup goals for the site. Should areas require further remediation after results of the Risk Assessment are known, contaminated soils would undergo soil stabilization/chemical fixation until lead is immobilized to meet applicable thresholds. If possible, all treated soils would be reused on-site. If on-site reuse of all soil is not possible (due to an exceedance of applicable thresholds), oversized material would be sent to a licensed disposal facility as California Hazardous Waste and the remaining soils would be treated on-site and used as a backfill after treatment. A Waste Discharge Requirement (WDR) will need to be obtained from the Regional Water Quality Control Board (RWQCB) for reuse of treated soil as backfill, and a deed restriction may need to be recorded with the City of Huntington Beach. Backfill, compaction, and grading procedures would be similar to those of Option 1. It should be noted that this option is the recommended soil remediation option, and would be part of RAP Alternative 2 as described above.

~ **Option 6 - On-Site Treatment, Partial Reuse, and Off-Site Disposal (RCRA Hazardous)**

This option would utilize techniques similar to those of Option 5. However, lead-impacted soils would be classified as RCRA Hazardous Waste. Backfill, compaction, and grading procedures would be similar to those of Option 1.

Wooden Post Fencing Removal

Remediation of the site would also require the removal and disposal of the wooden posts which surround and partition the former gun range facility. An estimated total of 2,241 cubic yards of wooden post fencing (622 cubic yards of lead-impacted wood and 1,619 cubic yards of non lead-impacted wood, resulting in approximately 187 truck trips) currently exist on-site.

~ **Option 1 - Dismantling, Cutting, and Off-Site Disposal**

Upon implementation of this option, on-site wooden posts would be dismantled, cut into manageable pieces, and either reused off-site by a third party or transported to a licensed landfill for proper disposal.

~ **Option 2 - Dismantling, Shredding, Screening, and Off-Site Disposal**

This option would include the dismantling of wooden posts, shredding of the posts on-site, separation of lead material through screening, followed by off-site disposal of the shredded wood at a licensed landfill or reuse off-site by a third party. This wooden post fencing option is the preferred option for the proposed project.

It should be noted that if a third-party user for the on-site wooden post fencing cannot be found, a cost analysis will be prepared to determine which option (Option 1 or Option 2) is more feasible for wooden post fencing removal.

Landfill Gas Generation

An active landfill gas extraction system has been designed for the Central Park Sports Complex (under construction) situated adjacent to the subject site. This system includes 34 vertical gas extraction wells and a 10 horsepower gas extraction blower facility with activated carbon canister scrubbers. If necessary, this landfill gas extraction system can be modified and expanded to extract potential landfill gases generated on the project site.

Recommended Remedial Option

Upon consideration of effectiveness for ultimate land usages and minimizing contaminant exposures, feasibility/availability of technologies and handling/disposal methods, durability and compatibility of the installed system with potential land uses, and annual maintenance, the RAP recommends the following remedial option to be completed in the chronological sequence presented (this recommended program is derived from excavation Alternative 2 above, soil treatment Option 5, and wooden post fencing removal Option 2, above):

- ~ Wooden posts, approximately 20 feet tall, will be dismantled, shredded and screened for lead on-site, and transported off-site for disposal at a licensed landfill.
- ~ Lead impacted soils in the firing range berm and spoils pile will be excavated to ground level and physically separated (screened) on-site utilizing "state-of-the-art" stacked pneumatic screening technology for profiling under United States Environmental Protection Agency (USEPA) SW-846 criteria (refer to Exhibit 4, *APPROXIMATE AREAS OF EXCAVATION*). Soils passing profiling criteria will be spread over the firing/pistol range areas. Those soils not satisfying profiling criteria would be treated on-site utilizing soils stabilization/chemical fixation methods (depending on the results of a bench scale study) and the treated material will be reused on-site, if feasible.
- ~ The excavated areas will be capped by asphalt (refer to Exhibit 4, *APPROXIMATE AREAS OF EXCAVATION*).

SITE REUSE

Following remediation, the site is proposed for development as an open space-recreation element of the Huntington Central Park. Huntington Central Park is located south of Slater Avenue, west of Gothard Street, north of Ellis Avenue, and east of Edwards Street. The Huntington Central Park Master Plan encompasses 356.8 acres, of which 220.8 acres are developed.⁴ It should be noted that, although the City has not developed a specific proposal for interim or long-term use of the site, it is the City's intention to develop the site in a manner consistent with City designations for the site. Existing site designations include "Open Space - Park (OS-P)" by the General Plan and "Open Space-Parks and Recreation (OS-PR)" by the Zoning and Subdivision Ordinance. In addition, the Central Park Master EIR sets forth five land use designations to be used within Huntington Central Park, which includes the subject site:

- ~ L - Recreation/Low Intensity: Open Space developed for low intensity passive-type researched activities.
- ~ M - Recreation/Medium Intensity: Open Space developed for medium intensity or semi-active recreation activities.
- ~ H - Recreation/High Intensity: Developed area for high intensity or active type recreation activities. This designation includes structural and/or support facilities.
- ~ E - Environmental Sensitive Areas: Limited development, for public use, that does not adversely impact identified scientific, ecological, cultural, or aesthetic features
- ~ O - Operations: Land set aside for maintenance/operational facilities.⁵

Possible long term uses, among others, include:

- ~ Maintenance/Operations Facility
- ~ Camping Area
- ~ Children's Playground
- ~ Picnic Area

Exhibit 4 Approximate Areas of Excavation

⁴ *Draft Master Environmental Impact Report for Master Plan of Recreation Uses for Central Park*, City of Huntington Beach, February 26, 1999.

⁵ Huntington Central Park Master Plan of Recreation Uses, February 6, 1999.

- ~ Snack Bar/Restaurant
- ~ Dog Park
- ~ Parking facility

Although a wide variety of possible interim or long-term development options exist, this EIR assumes a “Low” to “Medium” intensity recreational use, which may include the following: parking; irrigation; lighting; restroom/concession structure(s) (estimated to be no more than 5,000 square feet); recreational amenities (benches, par course and/or playground facilities); the implementation of sewer, water, and telephone utilities; and substantial landscaping. Due to the conceptual nature of potential recreational/open space uses, any future specific proposal for this site will require separate discretionary and environmental review.

3.5 PROJECT OBJECTIVES AND GOALS

The overall objectives and goals for the proposed remediation and reuse of the former gun range facility are intended to protect the health and safety of the local community and to provide recreational opportunities within the City.

BASIC PROJECT OBJECTIVES

The “basic project objectives” of the proposed project are to:

- 1). Remediate the former gun range facility of on-site contaminants resulting from over 20 years of firing range use, in order to protect the health and safety of those in the surrounding community.
- 2). Provide residents within the City of Huntington Beach with open space/recreational opportunities through the provision of interim/long-term park facilities after site remediation is complete.

3.6 PROJECT PHASING

Implementation of site demolition and remediation is expected to take approximately six months. A phasing schedule for subsequent interim/long-term park facility implementation has not been determined. Construction could take place immediately after the completion of site remediation, and would require an estimated additional six months to complete (depending on the nature of facilities).

3.7 AGREEMENTS, PERMITS, AND APPROVALS REQUIRED

The following agreements, permits, and approvals are anticipated to be necessary:⁶

Approval/Permit

Agency

Final EIR Certification

City of Huntington Beach

NPDES Permit

Santa Ana Regional Water Quality Control Board

Waste Discharge Requirement (WDR)

"

Landfill Gas Mitigation Plan/Building Plans

Orange County Health Care Agency

City of Huntington Beach Fire Department

Grading Plans

City of Huntington Beach

⁶

Additional agreements, permits, and/or approvals may be required depending on the interim/long-term use selected for the proposed project site.

4.0 OVERVIEW OF EIR METHODOLOGY AND SIGNIFICANCE DETERMINATION

The EIR includes as much detail as possible to maximize information available for public review and thus avoid and/or minimize the need for future environmental documentation (see Section 2.0 of this EIR for further explanation of the EIR process). The EIR includes information gathered from the Initial Study/Notice of Preparation (Appendix A), correspondence from utility/service providers (Appendix D), available literature/reference documents, and consultation with potentially affected agencies (see Section 2.7, *INCORPORATION BY REFERENCE*). In addition, several technical studies were prepared for review and incorporation into this EIR, including the Remedial Action Plan Report (Appendix B) and Air Quality Data (Appendix C).

The analysis of the project's impacts, as contained in this EIR, is presented to clearly indicate the significance determination for each of the impacts by numbering each impact, with a correspondingly numbered impact discussion, and, if necessary, mitigation measure(s). The significance determinations are based on a number of factors as explained in each impact section. These primarily include Appendix G of the CEQA Guidelines, General Plan policies, ordinances, generally accepted professional standards, and established quantified thresholds by the City of Huntington Beach or other agencies.

The following is an explanation of the different significance determinations made in this EIR:

A. Not Significant

This determination is made when any of the three following cases apply:

- 1) *No Impact:* Due to the nature or location of the project, this impact will not occur. For example, underground facilities do not have the potential for long-term visual impacts.
- 2) *Less Than Significant:* Although an impact may occur, it will not be at a significant level based on the above described standards. For example, construction-related air emissions that fall below the adopted air quality standards are less than significant.
- 3) *Potentially Significant Impact "Mitigated" Through Existing Requirements (No EIR mitigation required):* In this case, there is an impact which, although it is potentially significant, will be reduced to less than significant levels through adherence to and/or implementation of various existing requirements. These existing requirements include the City of Huntington Beach Ordinances, engineering and design requirements (through the Uniform Building Code and other regulations), and from other regional, state, and federal agencies.

B. Less Than Significant With Mitigation

This determination is made when a potentially significant impact can be reduced, avoided or offset to less than significant levels by incorporating EIR mitigation measures.

C. Significant With Mitigation

This determination is made for a potentially significant impact where there is either no mitigation available, or the recommended mitigation measures are not sufficient to reduce the impact to less than significant levels. This determination requires a Statement of Overriding Considerations, pursuant to CEQA Guidelines Section 15093 (this would be adopted by the City of Huntington Beach prior to approving the project).

4.1 PUBLIC HEALTH AND SAFETY

The purpose of this section is to discuss the existing site conditions and potential impacts of project implementation associated with public health and safety, with respect to existing site contamination from former gun range use, and potential issues associated with the underlying landfill. Information used in this section was obtained primarily from several prior site investigations, a Phase II Site Investigation conducted by Hart Crowser in April 2001 (see Appendix B), and the Remedial Action Plan prepared by Hart Crowser, October 14, 2002 (see Appendix B).

EXISTING CONDITIONS

ON-SITE LAND USES

The 4.91-acre gun range site was originally owned by the County of Orange as part of a County-operated landfill, which closed in the 1960's. The current gun range improvements were constructed over this landfill but the facility was closed in 1997 due to unstable soil caused by decomposing landfill waste.

Existing on-site structures include a small, elevated rangemaster's office, a small restroom facility, two office trailers, a covered row of firing stations, and a large storage shed. Wooden posts surround the entire facility and also partition the firing range into three separate areas. A six to eight foot berm composed of sand and dirt used as target backing rests along the northern border of the facility for a length of approximately 250 feet. For additional information regarding existing on-site features, refer to Appendix B, *REMEDIAL DOCUMENTATION*, Exhibit 2, *SITE VICINITY MAP*, Exhibit 3, *AERIAL PHOTO*, and Exhibit 8, *ON-SITE PHOTOS*.

FORMER GUN RANGE SITE HAZARDS

Due to the former landfill and gun range activities, the site represents a public health and safety hazard due to potential landfill gas migration as well as surface contamination. The City of Huntington Beach retained the services of Hart Crowser, Inc. to prepare the Remedial Action Plan (RAP) for the remediation portion of the proposed project. As part of the RAP preparation process, a Remedial Investigation Report, dated April 23, 2001, was prepared for the site. Through site investigation and research, Hart Crowser learned the following:

- ~ Two firing ranges were operated on the site (the existing main firing range and former pistol range immediately south of the main firing range).
- ~ Soil berms for both the main range and pistol range were "screened" on an irregular basis for approximately 25 years. This process apparently intended to achieve the physical removal of the soil berms for the separation of bullets and bullet fragments. The soil was deposited in a roughly 50 by 50-foot area on the southwestern portion of the site ("spoils pile"). An on-site tenant may have melted lead found on the firing range facility into ingots.
- ~ Fill soil was routinely imported to replace the soil berms and to compensate for subsidence of soils throughout the property. It is assumed that there is approximately three feet of fill material above the old landfill. The fill may not be uniform over the entire landfill.
- ~ The wood posts used as barriers surrounding and traversing the project site, originally thought to be coated with creosote, were actually coated with other coal tar (polynuclear aromatic hydrocarbons [PAH's]).

On March 12, 13, 14, 20, and 21st, 2001, Hart Crowser performed on-site sampling for heavy metals including zinc, copper, and lead. A total of 143 discrete soils samples, 9 composite soil samples, and 9 wood samples were analyzed from all areas of the site. Results indicated that:

- ~ The highest concentrations of lead were found throughout the berm of the main (northern) portion of the facility. There did not appear to be a lower depth at which lead concentrations diminished, however, landfill materials were encountered at unexpectedly shallow levels.
- ~ No samples exceeded Total Threshold Limit Concentrations (TTLC) values for copper or zinc, however, 13 samples exceeded the TTLC for lead in the northern and southern portions of the facility.
- ~ Of the 17 samples analyzed for soluble lead, a total of 11 exceeded the state established Soluble Threshold Limit Concentration (STLC).
- ~ No relationship between total and soluble lead concentrations was found to exist.
- ~ No direct relationship was identified between total and leachate concentrations for lead on-site.
- ~ Of the nine samples collected from the wood posts on-site, only anthracene was found to be below its relevant Preliminary Remediation Goals (PRG). All other PAHs were significantly above their relative PRGs.
- ~ Although no soil samples from the "spoils" pile were sent for soluble lead analysis, the total lead analyses suggest that lead values from this area are relatively low compared to other areas assessed on-site.
- ~ No recognizable areal pattern is discernible as to the distribution of detectable lead in soil samples collected throughout the subject property.

The existing media of concern on-site involve soils within the berms and spoils pile, main firing range and pistol range soils, and wooden post fencing. The contaminants of concern have been identified as total lead in soil and PAH's in wooden materials. Lead found in soil at the site is in the form of particulates/dust, small fragments, and nearly intact bullets and pellets.

It should be noted that Hart Crowser also performed confirmation sampling in November 2001. Confirmation sampling was conducted as an array of four samples surrounding each location where USEPA PRG, TTLC, STLC, or Toxicity Characteristic Leaching Procedure (TLC) exceedances were noted during the remedial investigation. Out of eight sampling locations, seven locations indicated total initial lead concentrations greater than or equal to 1,000 mg/kg. Confirmation samples at four of these locations confirmed the presence of greater than or equal to 1,000 mg/kg of lead. STLC numbers were below 1 mg/l for all submitted samples.

LANDFILL GAS HAZARDS

As previously stated, the subject site is located over the former Gothard Street Disposal Station. The former landfill was divided into two distinct areas consisting of 33.2 acres of mixed municipal refuse and 18.3 acres of construction demolition material. The subject site reportedly overlies a portion of the mixed municipal waste area of the landfill. Decomposing refuse has caused substantial subsidence on-site and also creates the possibility for landfill gas (LFG) migration. LFG contains significant concentrations of methane and carbon dioxide, and generally contains traces

of toxic compounds and carcinogens. If LFG accumulates in a building and methane is in the range of 5-15 percent by volume, an explosion can occur. Above 15 percent, combustion can occur from a spark. LFG existence is unknown at this time, as no monitoring has been performed on the project site. However, it should be noted that the adjacent Orange County Refuse Station has a long-term LFG monitoring program in place due to LFG hazards. In addition, an active landfill gas extraction system has been designed for the adjacent proposed Sports Complex that includes 34 vertical gas extraction wells and a 10 horsepower gas extraction blower facility with activated carbon canister scrubbers. If necessary, this landfill gas extraction system can be modified and expanded to handle the migration of gases from the subject site.

REGULATORY FRAMEWORK

Orange County Health Care Agency (OCHCA)

On March 12, 2002, Hart Crowser contacted the OCHCA to collect information regarding the Interim Guidance for Evaluating Lead Concentrations in Soil. Based on discussions with the OCHCA, the criteria OCHCA uses in evaluating soil lead concentrations are the USEPA Region 9 Industrial Preliminary Remediation Goal (USEPA-PRG) for lead (750 mg/kg) and the California Title 22 for TTLC (1,000 mg/kg) and STLC (5 mg/L) for the subject site.

Orange County Health Care Agency, Environmental Department

On March 11, 2002, Hart Crowser contacted the OCHCA's Environmental Department, in order to get information regarding an Interim Guidance for Evaluating Lead Concentrations in Soil. Based on discussions with the Environmental Department, the criteria used in evaluating the concentrations of lead in soil for areas where a child playing outdoors is at risk of lead poisoning is 400 mg/kg. HCA's Environmental Department may also use a soil lead concentration criteria of 1,000 mg/kg for non-child play areas.

Orange County Health Care Agency, Hazardous Waste Specialists

On March 12, 2002, Hart Crowser contacted the HCA's Hazardous Waste Specialists Department, in order to get information regarding an Interim Guidance for Evaluating Lead Concentrations in Soil. Based on discussions with the Hazardous Waste Specialists Department, the criteria used in evaluating the concentrations of lead in soil for areas where a child playing outdoors is at risk of lead poisoning is 400 mg/kg. HCA's Hazardous Waste Specialists Department may also use a soil lead concentration criteria of 1,000 mg/kg for non-child play areas.

California Department of Toxic Substances Control (DTSC)

The DTSC's Interim Guidance for Evaluating Lead Based Paint at proposed school sites is based on new laws (AB 387, AB 162, and AB 2644). Although a school is not an allowable use for the subject site, the DTSC's standards for school sites were utilized as an interim/long-term use involving children may be implemented on-site (campground, playground, etc.). For the initial screening of lead concentrations at a proposed school site, the highest concentration of lead should be compared to a screening value of 255 mg/kg derived from the DTSC lead model spreadsheet (Version 7). The model input concentration for air is based on regional and statewide air concentrations of lead, and water is based on an action level of 15 mg/L.

California Regional Water Quality Control Board (RWQCB)

On March 14, 2002, Hart Crowser contacted the Santa Ana Regional Water Quality Control Board (SARWQCB) in order to get information regarding the Interim Guidance for Evaluating Lead Concentrations in Soil. Based on discussions with SARWQCB, the criteria used in evaluating soil lead concentrations is five to 50 mg/kg, depending on groundwater depth, groundwater flow direction, and type of soil at a particular site.

California Department of Health Services, Childhood Lead Poisoning Prevention Branch (DHS)

On March 14, 2002, Hart Crowser contacted the DHS to collect information regarding an Interim Guidance for Evaluating Lead Concentrations in Soil. Based on discussions with DHS, the criteria used in evaluating soil lead concentrations for areas where a child playing outdoors is at risk of lead poisoning is 400 mg/kg. Through incidental contact with soil from outdoor play, children ingest tiny amounts of soil through what the EPA calls children's normal "hand-to-mouth activity". DHS may also use a soil lead concentration criteria of 1,000 mg/kg for non-child play areas.

United States Environmental Protection Agency (EPA)

New rules finalized by the EPA in January 2001 require industries across the country to report even small amounts of lead pollution to a public database maintained by the government called the Toxics Releases Inventory (TRI). However, in spite of scientific agreement on lead toxicity, and the need to reduce it, commercial firing ranges are exempt from the EPA's new lead reporting requirements. In California, the state law specifically exempts shooting ranges from civil liability or criminal prosecution for noise pollution. The state DTSC has authority over shooting ranges only if they are abandoned and classified as toxic dump sites (see Appendix B of the RAP).

According to EPA Toxic Substances Control Act (TSCA) Section 403 Standard, January 2001, the criteria for lead concentrations in soil, which are considered to be hazardous, is greater than 400 mg/kg in bare soil in children's play areas, and an average of 1,200 mg/kg for bare soil in the rest of the yard.

According to G. Fred Lee & Associates (see Appendix B of the RAP), if the lead concentration is below 1,000 mg/kg and the concentrations of leachable lead determined by the California extraction procedure, of the EPA's TCLP is less than 5 mg/kg, the soil is classified as "non-hazardous" in California and it may be disposed of in a municipal solid waste landfill. The soil is classified as a "hazardous waste" in California if the lead concentration is above 1,000 mg/kg. If classified as a "hazardous waste", it would have to be taken to a Resource Conservation Recovery Act (RCRA) "hazardous waste" landfill.

The EPA's RCRA regulations that govern wastes containing lead are directed to the disposal of the waste in a municipal landfill. The regulations are designed to protect groundwater supplies from pollution by landfill leachate. The EPA regulations specify a maximum concentration of lead that may be leached under specified conditions before the waste is classified as a hazardous waste. The EPA TCLP for designation of a lead-containing waste as a hazardous waste is based on a leachable lead concentration of 5.0 mg/L. Leachable lead values at or above this level cause a waste to be classified as a hazardous waste.

In accordance with RCRA land disposal restrictions, soil which is hazardous due to the lead toxicity characteristic (exceeds 5.0 mg/L when subjected to TCLP analysis) cannot be placed in an ordinary solid waste landfill. The soil will not require pre-treatment before disposal, but must be placed in a hazardous waste landfill. Costs associated with hazardous waste disposal can exceed ordinary

landfill costs by 10 to 100 times. Therefore, removing as many lead fragments as possible for recycling in an effort to reduce the overall lead content of the soils should be evaluated to determine whether the cost of disposal can be reduced (see Appendix B of the RAP).

California Code of Federal Regulations, Title 22

The California Code of Federal Regulations, Title 22, has established TTLC's used to designate a material as a hazardous waste for disposal evaluation. If the total concentration exceeds the TTLC (lead - 1,000 mg/kg), then the soils may be designated as a hazardous waste when considering landfill disposal. In order to evaluate leaching potential of a constituent, the California Waste Extraction Test (WET) may be run to evaluate the STLC (lead - 5 mg/L). If the TTLC or STLC are exceeded then the disposal material may be classified as a hazardous waste and require Class I landfill disposal or remediation if removed from the site. If the material exceeds the TTLC or STLC, then the TCLP analyses may be used to determine if the material is a RCRA or non-RCRA waste. Although native material or in-situ soils is no considered waste, the levels detected can be compared to the TTLC values for general evaluation.

City of Huntington Beach General Plan Hazardous Materials Element

In addition to applicable local, state and federal hazardous materials regulations regarding appropriate remediation standards, relevant policies contained within the City of Huntington Beach General Plan Element include:

- ~ Policy HM 1.1.1 (page Hazardous Materials Element - V-HM-7): "Facilitate proper disposal of hazardous waste by providing means for safe disposal."
- ~ Policy HM 1.1.4 (page Hazardous Materials Element - V-HM-7): "Implement federal, state, and local regulations for the handling, storage and disposal of hazardous materials."
- ~ Policy HM 1.4.2 (page Hazardous Materials Element - V-HM-7): "Require the containment of the hazardous waste site, thereby, ensuring the contaminated waste does not migrate or contaminate the ground water."

IMPACTS

Significance Criteria

As set forth in CEQA Guidelines Appendix G, a project will normally have a significant adverse environmental impact on public health and safety if it results in any of the following:

- ~ create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- ~ create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- ~ emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

- ~ be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or environment.

A Remedial Action Plan (RAP) has been prepared for the proposed project, which identifies specific site remediation measures to achieve acceptable levels of the applicable contaminants. The remediation process would minimize on-site lead contamination to meet the following criteria:

- ~ Per OCHCA standards, soils within the bermed area and “hot spots” which present lead concentrations higher than 750 mg/kg will be excavated. It is estimated that approximately 7,333 tons of soil meet this criteria for excavation.
- ~ Should on-site treatment be utilized, STLC levels would be minimized below the regulatory threshold of less than 5.0 mg/l. A bench scale treatability test would be conducted to determine the appropriate mix design for the specified treatment process.

The LEA establishes target clean-up goals based upon state and federal hazardous materials regulations, as well as site-specific conditions. For the purposes of this EIR, a “significant” public health and safety impact would occur if, upon implementation of the RAP, the project site still had contaminants that exceeded the target clean-up goals established by the LEA.

Remediation Hazards

Remedial alternatives for the proposed project are summarized in Section 3.0, *PROJECT DESCRIPTION*, and are described in detail in Appendix B, *REMEDIAL DOCUMENTATION*. Remedial alternatives would involve various levels of excavation, demolition, treatment, and off-site hauling of hazardous and non-hazardous materials, and would differ in scope and degree of potential environmental impacts. These potential impacts are described below:

Alternative One (no action) would not involve the implementation of remedial process, technologies, or techniques. On-site hazardous materials would be left in place and would not be handled or transported. Impacts to public health and safety through remedial hazards are not anticipated to occur with Alternative One. However, existing on-site lead contamination would remain, and the site would continue to represent a public health risk due to surface exposure and groundwater contamination.

Alternatives Two and Three involve the handling or treatment of hazardous materials on-site, including lead-contaminated soil and wood posting. Any accident resulting from mishandling or human error could possibly expose the community surrounding the project site, truck haul route, or waste disposal facility to lead contamination. However, all on-site remediation activities are required to be in strict compliance with applicable local, state, and federal regulations regarding the treatment and handling of hazardous materials. Adherence to applicable regulations and the implementation of appropriate mitigation measures would reduce impacts to less than significant levels.

In addition, remedial activities have the potential to disturb the former Gothard Street Disposal Station, which ceased operating in 1962 (this former landfill underlies the project site). The Final Remedial Investigation Report, dated April 2001, prepared by Hart Crowser, indicates that no landfill cap was detected in numerous borings that were performed. Refuse consisting of wood, plastic, glass, and brick was observed at depths as shallow as two to three feet below ground surface (BGS). Care will be taken to protect landfill materials under the site, and no excavation into

the landfill is proposed. However, as the precise depth of the landfill material varies throughout the site, additional agency approvals may be necessary should excavation extend into the landfill. In addition, should the recommended remedial option (provided in the RAP) be implemented, all excavated areas of the site would be capped with asphalt, thereby minimizing impacts should the landfill cap be disturbed. This cap will be inspected annually, and maintenance and repair will be performed as needed.

As previously stated, laboratory results indicated that wooden post fencing at the site was treated with coal tar (a common byproduct of manufactured gas plants, also referred to as coal gasification), and not creosote. The SARWQCB requires that creosote treated wood products be disposed of at a permitted, lined Class III landfill facility. However, as coal tar was found to coat the wooden posts, verbal clarification was received by Hart Crowser from the SARWQCB that coal tar wood preserved products may be chipped and disposed of under a cap on the site if concurrence is obtained from the South Coast Air Quality Management District (SCAQMD) for the chipping process and concurrence from OCHCA for on-site disposal beneath the cap. However, it should be noted that the recommended remedial option (as provided within the RAP) includes the dismantling, on-site chipping/shredding, lead screening, and off-site disposal of wooden posts and would not include chipping and on-site disposal beneath a cap.

It is also possible that, during site remediation and/or project construction, previously unidentified hazardous materials are discovered, such as lead-based paint or asbestos containing materials (ACMs). Should these materials be discovered, the remediation/construction contractor shall obtain a qualified contractor to survey the project site and assess the potential hazard. The contractor shall contact the SCAQMD and the City of Huntington Beach prior to asbestos/lead paint removal. Impacts in this regard will be mitigated to less than significant levels.

In addition, as stated in Section 3.0, *PROJECT DESCRIPTION*, a total of six options for soil remediation were presented in the RAP. Some of these options involve the reuse of screened/treated soils on-site. As such reuse may pose a health risk due to contaminants other than lead that may remain in the soil (such as arsenic or copper), these soils to be reused will be tested to ensure compliance with all local, state and federal standards prior to on-site reuse.

Landfill Gas Hazards

As stated previously, landfill gas generation due to underlying decomposing refuse poses a potential hazard to future interim or long-term uses on-site. Potential future structural improvements on-site involving the implementation of concrete/asphaltic flatwork, floor slabs, and foundations may cause accumulations of methane gas. Also, utility corridors and vaults can result in methane accumulations. Where cracks develop in foundations below structures, methane gas can migrate into the interior of overlying structures and create the potential for explosion or fire.

Prior to development of any specific interim or ultimate use, the City will conduct a landfill gas generation and migration study specific to the proposed use(s), as this study will require evaluation of site-specific building and grading plans (which are not available at this time since a specific use has not been identified). If deemed necessary, an active landfill gas extraction system will be implemented for the project site, by modifying and expanding the landfill gas system at the adjacent Sports Complex (which includes 34 vertical gas extraction wells and a 10 horsepower gas extraction blower facility with activated carbon canister scrubbers). The project site's landfill gas mitigation system, specific to any proposed use(s), will require review and approval by OCHCA, SCAQMD, SARWQCB, and City of Huntington Beach Fire Department. Impacts in regards to landfill gas are not anticipated to be significant with mitigation measures incorporated.

MITIGATION MEASURES

Remediation Hazards

- PHS-1 Prior to excavation of the contaminated and other areas for rough grading, the project site shall be cleared of all excess vegetation, surface trash, piping, debris and other deleterious materials. These materials shall be removed and disposed of properly (recycled if possible).
- PHS-2 Unless underground utility locations are well documented, as determined by the City of Huntington Beach Public Works Department, the contractor shall perform geophysical surveys prior to excavations to identify subsurface utilities and structures. Pipelines or conduits which may be encountered within the excavation and graded areas shall either be relocated or be cut and plugged according to the applicable code requirements.
- PHS-3 Proper excavation procedures shall be followed to comply with OSHA's Safety and Health Standards. If applicable, the South Coast Air Quality Management District (SCAQMD) Rule 1166 permit shall be obtained prior to the commencement of excavation and remedial activities.
- PHS-4 The contractor shall follow all recommendations contained within the adopted Remedial Action Plan for the project site.
- PHS-5 If asbestos or lead-based paints are identified in any on-site structures, the contractor shall obtain a qualified contractor to survey the project site and assess the potential hazard. The contractor shall contact the SCAQMD and the City of Huntington Beach prior to asbestos/lead paint removal.
- PHS-6 Prior to initiating the removal of structures and contaminated materials, the contractor must provide evidence that the removal of materials will be subject to a traffic control plan, as approved by the City Engineer. The intent of this measure is to minimize the time period and disruption of heavy duty trucks.
- PHS-7 If any hazardous materials not previously addressed in the mitigation measures contained herein are identified and/or released to the environment at any point during the site cleanup process, operations in that area shall cease immediately. At the earliest possible time, the contractor shall notify the City of any such findings. Upon notification of the appropriate agencies, a course of action will be determined subject to the approval of the City Manager.
- PHS-8 All structures must be cleaned of hazardous materials prior to off-site transportation, or hauled off-site as a waste in accordance with applicable regulations.
- PHS-9 Structure removal operations shall comply with all regulations and standards of the SCAQMD.
- PHS-10 The contractor shall post signs prior to commencing remediation, alerting the public to the site cleanup operations in progress. The size, wording and placement of these signs shall be reviewed and approved by the City Planning Department.

- PHS-11 Any unrecorded or unknown wells uncovered during the excavation or grading process shall be immediately reported to and coordinated with the City and DOGGR.
- PHS-12 All lead-impacted soils to be screened/treated and then reused on-site shall be tested prior to reuse to ensure compliance with all local, state, and federal specifications.

Landfill Gas Hazards

- PHS-13 Prior to the issuance of building permits for reuse of the subject site, the City shall perform appropriate studies to evaluate the potential for landfill gas generation and migration. If deemed necessary, an active landfill gas extraction system designed for the adjacent Sports Complex will be modified and expanded to extract landfill gas from the subject site. Appropriate mitigation measures will be coordinated with the SCAQMD, OCHCA, SARWQCB, and City of Huntington Beach Fire Department.
- PHS-14 A comprehensive landfill gas monitoring network shall be implemented around the perimeter of the subject site. Periodic monitoring of the monitoring network and at locations above the surface of the site will be performed.
- PHS-15 The City shall implement a cover system on areas of the site to be irrigated to control moisture infiltration into refuse beneath the site. A suitable cover system could consist of a synthetic geomembrane, geotextile fabric for protection of geomembrane and filtering for the drainage layer, a drainage layer, and a vegetation layer or an approved alternative.
- PHS-16 The contractor shall coordinate with the County of Orange's Integrated Waste Management Department in order to ensure that the proposed project does not impact drainage of the former landfill situated beneath the project site.

UNAVOIDABLE SIGNIFICANT IMPACTS

None have been identified.

4.2 LAND USE/RELEVANT PLANNING

The purpose of this section is to discuss the impacts of project implementation upon land uses on the project site and adjacent areas. This section includes a discussion of existing conditions including on-site and off-site land uses. Potential impacts of the proposed project are examined including compatibility with surrounding land uses, the City of Huntington Beach General Plan, and the City of Huntington Beach Zoning and Subdivision Ordinance. Information used in this section was obtained from a site survey performed by RBF personnel, the City of Huntington Beach General Plan, the City of Huntington Beach Zoning and Subdivision Ordinance, the Huntington Central Park Master EIR, and the United States Geological Survey (USGS) 7.5-Minute Maps of Newport Beach and Seal Beach, California.

EXISTING CONDITIONS

ON-SITE LAND USES

The approximately 4.91-acre site is located within the City of Huntington Beach, south of Talbert Avenue, north of Ellis Avenue, east of Golden West Street, and west of Gothard Street. The proposed project site consists of a former police/civilian gun range facility which ceased operation in 1997, including various deteriorating structures, debris, vacant dirt areas, and limited non-native shrubs and trees. For additional information regarding existing on-site features, refer to Section 3.2, *ENVIRONMENTAL SETTING*, Exhibit 2, *SITE VICINITY MAP*, Exhibit 3, *AERIAL PHOTO*, and Exhibit 8, *ON-SITE PHOTOS*.

ADJACENT LAND USES

Surrounding adjacent land uses include: the Central Park Sports Complex (under construction) to the west and north, the Hanson Recycling Center to the northeast, the Orange County Transfer Station to the east, and Sully Miller Lake to the south. Additional surrounding land uses include the following: Golden West Street, an equestrian center, and disc golf course to the west; Talbert Avenue, Huntington Central Library, and open space to the north; Gothard Street and light industrial/commercial to the east; and Ellis Avenue, light industrial, public uses, and residential to the south.

RELEVANT PLANNING

Zoning and Subdivision Ordinance

The purpose of the City's Zoning and Subdivision Ordinance is to implement the policies of the City of Huntington Beach General Plan. The goal of this document is to promote and protect the public health, safety, and general welfare of Huntington Beach residents and provide the physical, economic, and social advantages which result from a comprehensive and orderly planned use of land resources. The subject site's zoning designation is "Open Space - Parks and Recreation (OS-PR)" (refer to Exhibit 5, *ZONING*).

City of Huntington Beach General Plan

The City of Huntington Beach General Plan is used by the City of Huntington Beach as the document to set baseline land use criteria within the City (refer to Exhibit 6, *LAND USE DESIGNATIONS*). The project site is designated as “Open Space - Park (OS-P)” by the City’s General Plan. A description of allowable land uses within the existing General Plan and zoning designations is provided in Section 3, *PROJECT DESCRIPTION*. The project site, although not expressly identified for specific recreational uses within the Huntington Central Park Master Plan, has long been identified by the City as an important long-term element to complement the City’s Central Park plans.

IMPACTS

Significance Criteria

A project will normally have a significant adverse environmental impact on land use if it results in any of the following:

- ~ a conflict with adopted environmental plans and goals of the community in which it is located;
- ~ a disruption or division of the physical arrangement of an established community;
- ~ a conflict with established recreational, educational, religious, or scientific uses of the area;
- ~ induce substantial growth of concentration of people; or
- ~ displace a large number of people.

Potential impacts related to relevant planning, land use and growth have been identified and are categorized below according to topic.

LAND USE

The proposed Remedial Action Plan has the potential to create adverse effects upon adjacent land uses. These issues are discussed within the appropriate EIR section, including 4.1 (public health), 4.4 (air quality), 4.5 (noise), and 4.6 (aesthetics). With implementation of standard construction measures, safety provisions contained within the RAP, and recommended mitigation measures, there are no anticipated significant land use impacts associated with site remediation or construction activities.

With respect to land use compatibility issues associated with potential interim or long-term recreational/open space uses, the project is not anticipated to result in any significant impacts. As discussed in Section 3, *PROJECT DESCRIPTION*, the recreational/open space uses will be consistent with the General Plan and zoning designations, as well as goals identified in the Central Park Master Plan. The site is not expected to include more intense recreational activities such as an amphitheater or active recreational fields such as lighted ballfields. A number of land use topics are also addressed in other EIR sections, including Air Quality (Section 4.4), Noise (Section 4.5), and Aesthetics/Light & Glare (Section 4.7). It should also be noted that, upon selection of a specific

Exhibit 5 ZONING

Exhibit 6 LAND USE DESIGNATIONS

recreational/open space use, the proposed site plan would be subject to additional discretionary and environmental review.

RELEVANT PLANNING

The project is consistent with the City of Huntington Beach General Plan and Zoning and Subdivision Ordinance. The project evaluated within this EIR proposes to remediate and reuse the former gun range within Huntington Central Park in the City of Huntington Beach. The project does not propose to change any General Plan or zoning designations. In fact, site remediation is a necessary first step before the site can be used for its planned land use, allowing for implementation of the City's General Plan. In addition, the project site is an important component in the overall development of the City's Central Park, and will be designed for consistency with the Sports Complex currently under construction. During the "design development" stage, the City will be submitting more detailed plans reflecting code and policy compliance with specific issues. No significant relevant planning issues have been identified.

MITIGATION MEASURES

LAND USE

None required.

RELEVANT PLANNING

None required.

UNAVOIDABLE SIGNIFICANT IMPACTS

None have been identified.

4.3 GEOLOGY AND SOILS

The following section is based on information supplied by the City of Huntington Beach General Plan (May 1996), United States Department of Agriculture Soil Conservation Service and Forest Service Soil Survey (September 1978), the United States Geologic Survey Newport Beach Quadrangle (1981), the Alquist-Priolo Earthquake Fault Zoning Act (July 1995), the Geologic Map of Orange County California, Showing Mines and Mineral Deposits, California Division of Mines and Geology (1981), the Geotechnical Report, Central Park Sports Complex, Huntington Beach, California (2000), and the Federal Emergency Management Agency Flood Insurance Rate Map (revised February 13, 2002).

EXISTING CONDITIONS

SITE TOPOGRAPHY

The project site currently exists as a former gun range facility which ceased operations in 1997. The facility was constructed on portions of a former landfill (the Gothard Street Refuse Disposal Station) operated by the County of Orange until 1962. The site has a gently southerly sloping, undulating surface (due to differential settlement of the underlying refuse and soil cover), with an elevation of about 50 feet above mean sea level (msl). A six to eight foot high soil/ firing range berm occupies the northern margin of the site. There is wood post fencing (telephone pole type) surrounding the north, east, and western margins of the site, as well as forming divides between the different firing ranges internal to the gun range. There are also several cinderblock structures and a cinderblock dividing wall within the northern half of the site. Differential settlement of the underlying refuse/ soil cover has apparently caused a westward tilting of the north-south oriented telephone pole fencing both within the range and along the eastern and western margins of the site. The north-south trending cinderblock wall within the northeastern portion of the site has undergone lateral separation and southward tilting as a result of the underlying refuse/soil settlement. Also as the result of refuse/ soil settlement are numerous shallow depressions throughout the site that create isolated areas of ponded water during winter rains.

According to pre-1950 aerial photographs, the natural topography of the project site was represented by a southerly draining, 35-foot deep (+/-) natural drainage channel that had cut into the surface of the Huntington Beach Mesa (CH2MHILL, 1998). Prior to landfill activities, the site was mined for sand and gravel deposits derived from the Pleistocene age Lakewood Formation. The resulting pit began receiving typical nonhazardous municipal waste, including organic materials, in the early 1950's (CH2MHILL, 1998). Various subsurface investigations conducted within the former landfill area found the depth to the bottom of the landfill to be as great as 60 feet. However, there is no site-specific subsurface information relative to the depth of the landfill within the area of the former gun range. According to Hart Crowser's Remedial Investigation Report (2001), no evidence of a "landfill cap" was noted during their limited subsurface investigation of soils within the former gun range.

SURROUNDING TOPOGRAPHY

The southern edge of the site lies about 50 feet from a steep, 30-foot high (+/-) slope bordering the northern edge of Sully Miller Lake. An incised drainage channel borders the former gun range on the west. The northern and eastern margins of the site are bordered by relatively flat asphalt/graded dirt road surfaces associated with neighboring commercial sites.

SITE GEOLOGY

Bedrock

The subject site is situated within the central portion of what is commonly known as the Huntington Beach Mesa, which is located along the coastal plain of Orange County. The Mesa represents an uplifted topographic high that owes its existence to ongoing tectonic uplift along the seismically active Newport-Inglewood and Compton Blind Thrust faults. The Mesa is underlain at relatively shallow depths by Pleistocene age marine sediments (11,000 to 1,700,000 years before present), and is surrounded by Holocene age sediments (0 to 11,000 years before present), consisting of ancient river and flood plain, and tidal flat/lagoonal deposits. These younger Holocene age sediments consist of unconsolidated sand, gravel, silt and clay, as well as isolated pockets of peat and organic soil deposits located at shallow depths below the ground surface. Based on geologic mapping by the U.S. Geological Survey and California Division of Mines and Geology, the project site is not underlain by Holocene age deposits, with the exception of a veneer of native soil.

Artificial Fill

Recent geotechnical/environmental investigations by Kleinfelder (1989, 1990), and CH2MHILL (1998), estimate the thickness of the refuse within the former Gothard Street Refuse Disposal Station to be about 35 feet. According to CH2MHILL (1996, 1998), amec (2000), and HartCrowser (2001), the majority of the landfill site has been covered with loose to medium dense silty sands and clayey sand from less than four feet to 25 feet in thickness. The Remedial Investigation Report performed by Hart Crowser (2001) found inert trash and other debris within about two feet of the ground surface within the northern portion of the facility.

However, due to hydrocarbon odors and associated soil discoloration encountered by Hart Crowser within the main firing range area, only the uppermost three feet of soil cover was penetrated by their exploratory borings within the southern half of the site. Although no evidence of landfill refuse was noted within Hart Crowser's shallow test borings in the southeastern portion of the site (i.e. the pistol range), the soil was noted to be stiffer and contained small brick and wood fragments beneath a depth of about two feet below the ground surface.

Topsoil

As shown in Exhibit 7, *SOIL TYPES*, the subject site is underlain by Xeralfic Arents, which can be characterized as loamy with two to nine percent slopes.¹ These soils have a high runoff and erosion potential. However, the majority of these native soils were removed during the mining of sand and gravel prior to the site's use as a gun range facility, and Xeralfic Arents may only be present along the easternmost portion of the site.

Seismicity

The project site lies within the seismically active Southern California region that is subject to the effects of moderate to large earthquake events along major faults. Regional faults that could affect the project are the Newport-Inglewood Fault Zone (NIFZ), Compton-Los Alamitos Blind Thrust Fault, and the Palos Verdes, Whittier-Elsinore, and other active and potentially active faults associated with the San Andreas fault system. The regional faults closest to the site include the NIFZ, located about one mile away, and the Compton-Los Alamitos Blind Thrust (ramp) that is situated approximately four miles directly below the project area (Shaw, 1993). The Palos Verdes, Whittier-Elsinore, and other faults of the San Andreas fault system are situated between nine to 48 miles from the site.

According to the 1999 Seismic Shaking Hazard Maps of California, the level of ground motion (measured in percent of gravity "g") at the site that has 1 chance in 475 of being exceeded each year is approximately 0.5g. This level of ground acceleration is equal to a 10% probability of being exceeded in 50 years, and considers all seismic sources within the southern California area.

Faulting

No active faults have been mapped or known to cross the site, nor does it lie within an Alquist-Priolo Special Studies Zone as defined by the California Division of Mines and Geology (CDMG). Due to the non-existence of active faults on the site, the likelihood of surface rupture is considered to be very low to nil. There is, however, a likelihood of some minor amount of ground deformation resulting from differential settlement of the underlying refuse during a major earthquake in the region.

Liquefaction/Subsidence Potential

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similar to liquid when subject to intense ground shaking. Liquefaction occurs when three general conditions exist: 1) shallow groundwater; 2) low density silty or fine sandy soils; and 3) high-intensity ground motion. Liquefaction occurs when the dynamic loading of a saturated sand or silt causes pore water pressures to increase to the point where grain-to-grain contact is lost and the material temporarily

¹ Soil Survey of Orange County and Western Part of Riverside County, California, U.S. Department of Agriculture, Soil Conservation Service and Forest Service, 1978.

behaves as a viscous fluid. Liquefaction can cause settlement of the ground surface, settlement and tilting of engineered structures, flotation of buoyant buried structures and fissuring of the ground surface. A common trait of liquefaction is formation of sand boils - short lived fountains of soil and water that emerge from fissures or vents and leave freshly deposited conical mounds of sand or silt on the ground surface. Review of available information for the site suggests that the liquefaction potential is nil.

Significant subsidence has occurred on-site due to the decomposing landfill, as the proposed project site is underlain by the former Gothard Street Refuse Disposal Station. This subsidence has resulted in differential settlement/tilting of the various structures (e.g. masonry walls and buildings, fences, etc.) within the site. In addition, numerous depressions exist throughout the site as a result of settling. Subsidence issues ultimately resulted in the closure of the firing range facility in 1997.

Landslides

Potential landslide areas within the City of Huntington Beach are limited to the mesa bluffs region. The proposed project site is not in this region. Therefore, the risk of landslides within the site vicinity is low. It should be noted that given the proximity of the southern margin of the subject site to the steep slope of the Sully Miller Lake (former rock quarry), isolated slope failures could occur as a result of strong ground motion due to an earthquake. However, such a slope failure would not be expected to encroach the project site, given the distance from the top of slope to the southern margin of the subject site.

Groundwater/Percolation and Drainage

The elevation of the groundwater table beneath the site closely approximates that of sea level and fluctuates with tidal cycles. Review of available information for the project site does not indicate shallow groundwater conditions for the site. In addition, groundwater was not encountered during soil borings drilled as part of Hart Crowser's (2001) Phase II site characterization testing.

Landfill Gas

As previously stated, the subject site is located over the former Gothard Street Disposal Station. Decomposing refuse beneath the site creates the possibility for landfill gas (LFG) generation. LFG contains significant concentrations of methane and carbon dioxide, and generally contains traces of toxic compounds and carcinogens. If LFG accumulates in a building and methane is in the range of 5-15 percent by volume, an explosion could occur. Above 15 percent, combustion can occur from a spark. LFG existence is unknown at this time, as no monitoring has been performed on the project site. However, it should be noted that the adjacent Orange County Transfer Station (situated to the east of the subject site) has a long-term LFG monitoring program in place due to LFG hazards.

EXHIBIT 7
Soil Types

IMPACTS

Significance Criteria

Based on the criteria set forth by CEQA, a project may create a significant geological environmental impact if one or more of the following occurs:

- ~ Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
 - Strong seismic ground shaking;
 - Seismic-related ground failure, including liquefaction;
 - Landslides;
- ~ Result in substantial soil erosion or the loss of topsoil;
- ~ Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in an on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, creating substantial risks to life or property;
- ~ Be located on expansive soils, as defined in Table 18-1 B of the Uniform Building Code (1994), creating substantial risks to life or property;
- ~ Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater;

WIND/WATER EROSION

Excavation, grading, and backfilling associated with project implementation is anticipated to generate erosive conditions that may include sediment laden storm run-off or dust. Appendix G of the Drainage Area Management Plan (DAMP) by the Orange County Stormwater Management Program states that for any construction site larger than five acres, a National Pollution Discharge Elimination System (NPDES) Permit must be obtained from the Santa Ana Regional Water Quality Control Board (SARWQCB) for the construction process. Although the proposed project site is below the current five-acre threshold (the project site is 4.91 acres in size), beginning March 10, 2003, the five-acre threshold for the NPDES construction permit will be lowered to one-acre. Therefore, the City will be required to obtain an NPDES permit from the SARWQCB, due to potential water quality hazards created by the underlying landfill waste.

As part of the NPDES process, the project would also comply with the State of California general permit (including the submittal of a Notice of Intent to the SARWQCB) and would include the preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will outline the source control and/or treatment control BMPs that would avoid or mitigate runoff pollutants at the

construction site to the “maximum extent practicable”. Implementation of best management practices (BMPs) as found in the Orange County NPDES Stormwater Program Drainage Area Management Plan (DAMP) and the Standard Specifications for Public Works Construction “Greenbook” which include such measures as use of sand bags and temporary dam building may be applied to sufficiently reduce sediment laden storm run-off. Additionally, area watering and limiting excavation, backfilling and grading activities to non-windy days will sufficiently control the amount of particulate matter that may migrate off-site. As lead-impacted storm water runoff is a particular concern, the SWPPP will incorporate additional BMPs to contain soil erosion on-site, and also to halt any excavation/remediation activities during a rain event, including the export of soil off-site. Therefore, this is not considered a significant impact with mitigation.

The current project site has large areas of exposed soils, which currently generate wind and waterborne sediment. It is anticipated that the majority of the subject site would be either landscaped or paved, thereby reducing the likelihood for long-term operational wind/water erosion impact to less than significant levels. In addition, the City will comply with typical City erosion control measures and those required through the NPDES program. Therefore, future site development is expected to have a favorable reduction of existing erosion hazards.

TOPOGRAPHY

As stated above, the site has a gently southerly sloping, undulating surface (due to differential settlement of the underlying refuse and soil cover), with an elevation of about 50 feet above mean sea level (msl). The existing site has been developed/disturbed, and contains no unique geological or physical features. No significant landform impacts are anticipated.

GEOLOGY/SOILS

As stated previously, earlier analysis has shown that the subject site is mantled by a two- to four-foot thick (+/-) cap of loose to medium dense fill soils that are underlain in large part by as much as 35 feet of landfill refuse. The subject site has undergone differential subsidence and settling due to decomposing landfill and the settling/shifting of the overlying layer of soil. Remediation and construction operations will be conducted utilizing available information indicating the depths of the former landfill underlying the site. As no landfill cap is apparent, and due to the lack of complete information regarding the location and depth of fill materials, penetration of the landfill during excavation and grading may occur. However, as part of the Remedial Action Plan prepared for the project, grading for remedial activities is based on the movement of no more than six inches of material over the proposed grading area. Should the landfill be penetrated, additional agency approvals may be necessary.

Long-term operational impacts in regards to geology and soils vary depending on the type of land use implemented subsequent to remedial activities. As stated previously, possible interim or long-term development options as allowable by the Huntington Central Park Master Plan include:

- ~ L - Recreation/Low Intensity: Open Space developed for low intensity passive-type researched activities.

- ~ M - Recreation/Medium Intensity: Open Space developed for medium intensity or semi-active recreation activities.
- ~ H - Recreation/High Intensity: Developed area for high intensity or active type recreation activities. This designation includes structural and/or support facilities.
- ~ E - Environmental Sensitive Areas: Limited development, for public use, that does not adversely impact identified scientific, ecological, cultural, or aesthetic features.
- ~ O - Operations: Land set aside for maintenance/operational facilities.²

Possible long term uses, among others, include:

- ~ Maintenance/Operations Facility
- ~ Camping Area
- ~ Children's Playground
- ~ Picnic Area
- ~ Snack Bar/Restaurant
- ~ Dog Park
- ~ Parking facility

As a requirement of the Remedial Action Plan for the proposed project, backfill and compaction of clean material is based on utilizing an engineered fill material suitable for construction purposes. Fill material would be placed and compacted to a minimum of 90 percent of maximum dry density in accordance with American Society of Testing Materials (ASTM) D1557 standards. However, as decomposing landfill materials would remain underneath the subject site following remediation, potential reuse alternatives involving on-site structures would require enhancements to provide a stable foundation, including such special design measures as reinforced concrete pads and/or the use of piles and grade beams for support.

A detailed geotechnical survey will be performed during the design phase of the proposed project, specific to the particular use(s) proposed. This survey will further characterize on-site geologic conditions and will determine the site's soil bearing capacity for any proposed structure(s). This information would be used to develop a detailed foundation design for on-site structures. The City, as the property owner and likely proponent of any future use(s), understands the unique site conditions and limitations on structural load capability due to underlying landfill materials, which will be considered in development of any future site use(s). With implementation of recommended mitigation measures, and adherence to the Uniform Building Code (UBC), impacts in this regard are anticipated to be less than significant.

² Huntington Central Park Master Plan of Recreation Uses, February 6, 1999.

SEISMICITY

Although the project is located in seismically active Southern California, any potential future development will be designed in compliance with the seismic safety requirements of the UBC and applicable California Department of Mines and Geology (CDMG) publications. As no active faults traverse the site, impacts from surface rupture are not anticipated to be significant. All grading and building plans will be subject to City of Huntington Beach review and approval. The site has limited structural load capability due to underlying landfill material, which will limit the extent of any structures and therefore limit the extent of potential seismic impacts. Impacts in this regard are expected to be less than significant with mitigation measures incorporated and the required site-specific geotechnical investigation.

LIQUEFACTION/SUBSIDENCE POTENTIAL

While the City's GIS database indicates that a potential for liquefaction exists beneath the subject site, any potential future development will be subject to the Uniform Building Code (UBC) and City standard design requirements in regards to liquefaction. In addition, as a layer of decomposing landfill refuse (estimated to be 35 feet in thickness) with highly compressible qualities exists beneath the site, the site is also subject to potential landfill material settlement. Any proposed structures will have foundations designed in consideration of seismic, liquefaction and settlement constraints. Impacts in this regard are expected to be less than significant.

LANDFILL GAS

As stated previously, landfill gas generation due to underlying decomposing refuse poses a potential hazard to future interim or long-term uses on-site. Potential future structural improvements on-site involving the implementation of concrete/asphaltic flatwork, floor slabs, and foundations may cause accumulations of methane gas. Also, utility corridors and vaults can result in methane accumulations. Where cracks develop in foundations below structures, methane gas can migrate into the interior of overlying structures and create the potential for explosion or fire.

Prior to development of any specific interim or ultimate use, the City will conduct a landfill gas generation and migration study specific to the proposed use(s), as this study will require evaluation of site-specific building and grading plans (which are not available at this time since a specific use has not been identified). If deemed necessary, an active landfill gas extraction system will be implemented for the project site, by modifying and expanding the landfill gas system at the adjacent Sports Complex (which includes 34 vertical gas extraction wells and a 10 horsepower gas extraction blower facility with activated carbon canister scrubbers). The project site's landfill gas mitigation system, specific to any proposed use(s), will require review and approval by OCHCA and the City Fire Department. Impacts in regards to landfill gas are not anticipated to be significant with mitigation measures incorporated.

MITIGATION MEASURES

WIND/WATER EROSION

GEO-1 Concurrent with the submittal of the Grading Plan, an Erosion Control Plan shall be submitted to the City of Huntington Beach Department of Public Works which will include the following measures:

- a) Where necessary, temporary and/or permanent erosion control devices, as approved by the Department of Public Works, shall be employed to control erosion and provide safety during the rainy season from October 15th to April 15th. Such devices will be designed to avoid infiltration of rainwater and/or surface water into the underlying refuse materials.
- b) Equipment and workers for emergency work shall be made available at all times during the rainy season. Necessary materials shall be available on-site and stockpiled at convenient locations to facilitate the rapid construction of temporary devices when rain is imminent.
- c) Erosion control devices shall not be moved or modified without the approval of the Department of Public Works.
- d) All removable erosion protective devices shall be in place at the end of each working day when the 5-day rain probability forecast exceeds 40%.
- e) After a rainstorm, all silt and debris shall be removed from streets, check berms and basins.
- f) Graded areas on the permitted area perimeter must drain away from the face of the slopes at the conclusion of each working day. Drainage is to be directed toward desilting facilities.
- g) The permittee and contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded water creates a hazardous condition. Impoundment areas designed to receive surface water runoff shall be adequately lined in order to prevent infiltration of collected water into underlying refuse.
- h) The permittee and contractor shall inspect the erosion control work and ensure that the work is in accordance with the approved plans.
- i) Water shall be applied to the site twice daily during grading operations or as otherwise directed by the County of Orange Inspector in compliance with South Coast AQMD rule 403 (Fugitive Dust Emissions). A grading operations plan may be required including watering procedures to minimize dust, and equipment procedures to minimize vehicle emissions from grading equipment.

GEO-2 Remediation and construction shall include Best Management Practices (BMPs) as stated in the Drainage Area Management Plan (DAMP) by the Orange County Stormwater Management Program. BMPs applicable to the project include the following:

- ~ Potential pollutants include but are not limited to: solid or liquid chemical spills; wastes from paints, stains, sealants, glues, limes, pesticides, herbicides, wood preservatives and solvents; asbestos fibers, paint flakes, or stucco fragments; fuels, oils, lubricants, and hydraulic, radiator, or battery fluids; fertilizers, vehicle/equipment wash water and concrete wash water; concrete, detergent, or floatable wastes; wastes from any engine/equipment steam cleanings or chemical degreasing; and superchlorinated potable water line flushings.
- ~ During remediation/construction, disposal of such materials should occur in a specified and controlled temporary area on-site, physically separated from potential stormwater run-off, with ultimate disposal in accordance with local, state, and federal requirements.

GEO-3 As part of its compliance with the NPDES requirements, the Applicant shall prepare a Notice of Intent (NOI) to be submitted to the Santa Ana Regional Water Quality Control Board providing notification and intent to comply with the State of California general permit. Prior to remediation/construction, completion of a Storm Water Pollution Prevention Plan (SWPPP) will be required for remediation/construction activities on-site. The SWPPP shall incorporate BMPs as found in the Orange County NPDES Stormwater Program DAMP, and shall also include BMPs to contain lead-impacted soils on-site and halt excavation/remediation activities during a rain event, including export of soils off-site. A copy of the SWPPP shall be available and implemented at the construction site at all times.

TOPOGRAPHY

None required.

GEOLOGY/SOILS

GEO-4 A detailed geotechnical report shall be prepared and submitted with the building permit application for the proposed facilities/ structures. This analysis shall incorporate the findings of the Remedial Action Plan and will include on-site soil sampling and laboratory testing of materials to provide detailed recommendations regarding grading, foundations, retaining walls, overexcavation/ recompaction, and chemical/fill properties of underground items including buried pipe and concrete and protection thereof. The reports shall specifically address lateral spreading and liquefaction potential. The geotechnical report shall also be submitted to the Department of Public Works for review and approval in conjunction with the grading plan. Appropriate recommendations regarding soil stabilization for structural loads associated with potential subsidence hazards shall be provided to mitigate potentially adverse conditions. Typical methods include, but are not limited to:

- ~ pre-loading areas where structures are planned to reduce the elastic component of the refuse settlement;

- ~ in-situ improvement of the upper portions of the refuse through the use of dynamic compaction; and
- ~ include a synthetic reinforcement material in the cover soil layer to create a stiff layer of soils capable of supporting structures and tending to distribute the effects of differential settlement.

GEO-5 In conjunction with the submittal of application for preliminary or precise grading permits, the City shall ensure that the geotechnical report recommendations have been incorporated into the grading plan unless otherwise specified in the geotechnical report and/or by the City Engineer.

GEO-6 Prior to the interim or long-term facility construction, the City shall ensure that the preliminary geotechnical report recommendations have been incorporated into the grading plan unless otherwise specified in the geotechnical report and/or by the City Engineer.

SEISMICITY

GEO-7 Due to the potential for ground shaking in a seismic event, the project shall comply with the standards set forth in the UBC (most recent edition) to assure seismic safety to the satisfaction of the Department of Building and Safety prior to issuance of a building permit, including compliance with California Division of Mines and Geology Special Publication 117 (Guidelines for Evaluating and Mitigating Seismic Hazards in California, adopted March 13, 1997).

LIQUEFACTION

None required.

LANDFILL GAS

GEO-8 Prior to the issuance of building permits for reuse of the subject site, the City shall perform appropriate studies to evaluate the potential for landfill gas generation and migration. If deemed necessary, an active landfill gas extraction system designed for the adjacent Sports Complex will be modified and expanded to extract landfill gas from the subject site. Appropriate mitigation measures will be coordinated with the SCAQMD, OCHCA, SARWQCB, and City of Huntington Beach Fire Department.

GEO-9 A comprehensive landfill gas monitoring network shall be implemented around the perimeter of the subject site. Periodic monitoring of the monitoring network and at locations above the surface of the site will be performed.

GEO-10 The City shall implement a cover system on areas of the site to be irrigated to control moisture infiltration into refuse beneath the site. A suitable cover system could consist of a synthetic geomembrane, geotextile fabric for protection of geomembrane and

filtering for the drainage layer, a drainage layer, and a vegetation layer or an approved alternative.

- GEO-11 The contractor shall coordinate with the County of Orange's Integrated Waste Management Department in order to ensure that the proposed project does not impact drainage of the former landfill situated beneath the project site.

UNAVOIDABLE SIGNIFICANT IMPACTS

None have been identified.

4.4 AIR QUALITY

Information in this section is based primarily upon the CEQA Air Quality Handbook, South Coast Air Quality Management District (SCAQMD), April 1993 (as revised through November 1993), Air Quality Data (SCAQMD, 1996 through 2000), the AQMD CEQA Website (www.aqmd.gov/ceqa/hdbk.html), the City of Huntington Beach General Plan (1996) and General Plan Environmental Impact Report (1995) and the Final 1997 AQMP (SCAQMD, January 1997). Additional reference material was obtained from the California Air Resources Board. This section focuses on potential short-term air quality impacts associated with remediation and construction activity, in addition to long-term local and regional air quality impacts associated with the proposed project. Mitigation measures are also recommended to reduce the significance of impacts.

EXISTING CONDITIONS

SOUTH COAST AIR BASIN

Climate

The project site is located in the South Coast Air Basin (SoCAB), characterized as having a Southern California “Mediterranean” climate (a semi-arid environment with mild winters, warm summers and moderate rainfall). The SoCAB is a 6,600-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. SoCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Geronio Pass area in Riverside County. The distinctive climate of the SoCAB is determined by its terrain and geographical location, as the SoCAB is a coastal plain with connecting broad valleys and low hills. The general region lies in the semi-permanent high pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The climate is characterized by moderate temperatures and comfortable humidities with precipitation limited to a few storms during the winter season (November through April). The average annual temperature varies little throughout the SoCAB, averaging 62 degrees Fahrenheit.¹ All portions of the SoCAB have had recorded temperatures over 100 degrees in recent years. January is usually the coldest month at all locations while July and August are usually the hottest months of the year. In the City of Huntington Beach, the summers are usually cooler than areas located further inland within the SoCAB. The annual mean temperature in the Orange County area (which includes the City of Huntington Beach) is 66 degrees Fahrenheit, with small daily and seasonal variations. On rare occasions, temperatures may exceed 100 degrees Fahrenheit or fall below freezing.

¹ CEQA Air Quality Handbook, South Coast Air Quality Management District, revised November, 1993, page A8-1.

~ *Rainfall*

Although the SoCAB has a semi-arid climate, the air near the surface is moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by off-shore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature. Annual average relative humidity is 70 percent at the coast and 57 percent in the eastern part of the SoCAB. Precipitation is typically 9 to 14 inches annually in the SoCAB and is rarely in the form of snow or hail due to typically warm weather. The frequency and amount of rainfall is greater in the coastal areas of the SoCAB.

~ *Winds*

With very low average wind speeds, the SoCAB's atmosphere has a limited capability to disperse air contaminants horizontally. Inland areas record slightly lower wind speeds than coastal areas. Summer wind speed averages slightly higher than winter wind speeds. The dominant daily wind pattern in the SoCAB is a daily sea breeze and a nighttime land breeze. This regime is broken only by occasional winter storms and infrequent strong northeasterly Santa Ana wind flows from the mountains and deserts north of the SoCAB.

~ *Temperature Inversions and Smog*

Under ideal meteorological conditions and irrespective of topography, pollutants emitted into the air would be mixed and dispersed into the upper atmosphere. However, the Southern California region frequently experiences temperature inversions in which pollutants are trapped and accumulate close to the ground. The inversion, a layer of warm, dry air overlaying cool, moist marine air, is a normal condition in the south land. The cool, damp and hazy sea air capped by coastal clouds is heavier than the warm, clear air which acts as a lid through which the marine layer cannot rise. The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet, the terrain prevents the pollutants from escaping and it backs up along the foothill communities. Below 1,200 feet, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Usually, inversions are lower before sunrise than during the daylight hours. Mixing heights for inversions are lower in the summer and more persistent, being partly responsible for the high levels of ozone observed during summer months in the SoCAB. Smog in Southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods of time, allowing them to form secondary pollutants by reacting with sunlight. The SoCAB has a limited ability to disperse these pollutants due to typically low wind speeds. However, pollutant conditions on the coast are generally much better than inland areas.

AMBIENT AIR QUALITY STANDARDS

Air quality at any location is dependent on the regional air quality and local pollutant sources. Regional air quality is primarily a function of Air Basin topography and wind patterns.

Ambient air quality is described in terms of compliance with Federal and State standards. Ambient air quality standards are the levels of air pollutant concentration considered safe to protect the public health and welfare. They are designed to protect people most sensitive to respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. National Ambient Air Quality Standards (NAAQS) were established by the U.S. Environmental Protection Agency (EPA) in 1971 for six air pollutants. States have the option of adding other pollutants, to require more stringent compliance, or to include different exposure periods. California Ambient Air Quality Standards (CAAQS) for these same six pollutants and NAAQS are included in Table 4.4-1, *LOCAL AIR QUALITY LEVELS*.

The California Air Resources Board (CARB) is required to designate areas of the State as attainment, non-attainment, or unclassified for any State standard. An "attainment" designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A "non-attainment" designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An "unclassified" designation signifies that data do not support either an attainment or non-attainment status.

The EPA designates areas for O₃, CO, and NO_x as either "Does not meet the primary standards," "Cannot be classified," or "Better than national standards." For sulfur dioxide (SO₂), areas are designated as "Does not meet the primary standards," "Does not meet the secondary standards," "Cannot be classified," or "Better than national standards." All other areas are designated "Unclassified." The attainment status designations for each of the six criteria pollutants are described below within the "Ambient Air Quality" discussion.

AMBIENT AIR QUALITY

The South Coast Air Quality Management District (SCAQMD) operates several air quality monitoring stations within the Air Basin. The Costa Mesa Monitoring Station, located along Mesa Verde Drive, is the nearest air monitoring station to the project site. The data collected at this Station is considered to be representative of the air quality experienced in the project vicinity. Air quality data from 1996 to 2000 for the Costa Mesa Monitoring Station is provided in Table 4.4-1, *LOCAL AIR QUALITY LEVELS*. As PM₁₀ levels were not monitored at this Station, measurements from the second nearest monitoring station (Anaheim) are also listed in Table 4.4-1. The following air quality information briefly describes the various types of pollutants.

**Table 4.4-1
 LOCAL AIR QUALITY LEVELS
 (As measured at the Costa Mesa and Anaheim
 Ambient Air Monitoring Stations)**

Pollutant	California Standard	Federal Primary Standard	Year	Maximum ¹ Concentration	Days (Samples) State/Federal Std. Exceeded
Carbon Monoxide (Costa Mesa Station)	20 ppm for 1 hour	35 ppm for 1 hour	1997	7.3	0/0
			1998	9.0	0/0
			1999	7.8	0/0
			2000	7.8	0/0
			2001	6.2	0/0
	9 ppm for 8 hours	9 ppm for 8 hours	1997	5.9	0/0
			1998	7.1	0/0
			1999	6.4	0/0
			2000	6.3	0/0
			2001	4.7	0/0
Ozone (Costa Mesa Station)	0.09 ppm for 1 hour	0.12 ppm for 1 hour	1997	0.1	0/0
			1998	0.1	5/0
			1999	0.1	1/0
			2000	0.1	1/0
			2001	0.1	1/0
Nitrogen Oxides (Costa Mesa Station)	0.25 ppm for 1 hour	0.053 ppm annual average	1997	0.1	0/0
			1998	0.1	0/0
			1999	0.1	0/0
			2000	0.1	0/0
			2001	0.1	0/0
Sulfur Dioxide (Costa Mesa Station)	0.25 ppm for 1 hour	0.14 ppm for 24 hours or 80 Fg/m ³ (0.03 ppm) annual average	1997	0.0	0/0
			1998	0.0	0/0
			1999	0.0	0/0
			2000	0.0	0/0
			2001	0.0	0/0
PM ₁₀ (Anaheim Station)	50 Fg/m ³ for 24 hours	150 Fg/m ³ for 24 hours	1997	91.0	11/0
			1998	81.0	12/0
			1999	122.0	15/0
			2000	126.0	3/0
			2001	93.0	8/0
PM _{2.5} (Anaheim Station)	N/A	65 Fg/m ³ for 24 hours	1997	No Data	N/A
			1998	No Data	N/A
			1999	68.6	N/A/2
			2000	113.9	N/A/6
			2001	55.0	N/A/0

ppm = parts per million

ug/m³ = micrograms per cubic meter

NOTES

1. Maximum concentration is measured over the same period as the California Standard.
2. PM₁₀ exceedances are derived from the number of samples exceeded, not days.
3. PM₁₀ exceedances are based on state thresholds established prior to amendments adopted on June 20, 2002.

Source: Data obtained from the California Air Resources Board ADAM Data Summaries Website, www.arb.ca.gov/adam/welcome.html.

Ozone

O₃ is a colorless toxic gas that can irritate the lungs and damage materials and vegetation. Levels of O₃ exceed Federal and State standards throughout the Air Basin. Because O₃ formation is the result of photochemical reactions between NO_x and reactive organic compounds (ROC), typically produced by combustion sources, peak concentrations of O₃ occur downwind of precursor emission sources. The entire Air Basin is designated as a non-attainment area for State and Federal O₃ standards. As indicated in Table 4.4-1, some exceedances of State standards for O₃ occurred at local air monitoring stations from 1997 through 2001. The State O₃ standard was exceeded between 1 and 5 times over this period. The Federal O₃ standard was not exceeded during the last five years.

Carbon Monoxide

CO is an odorless, colorless toxic gas, produced almost entirely from combustion sources (automobiles). This pollutant interferes with the transfer of oxygen to the brain and it is generally associated with areas of high traffic density. The Orange County portion of the SoCAB is designated as an attainment area for State CO standards while the entire SoCAB is designated a non-attainment area for Federal CO standards. The 8-hour and 1-hour standard have not been exceeded at the Costa Mesa station in the last five years.

Nitrogen Oxides

Nitrogen oxides (NO_x), the term used to describe the sum of nitrogen oxide (NO), nitrogen dioxide (NO₂), and other oxides of nitrogen, are produced by high-temperature combustion processes (e.g., motor vehicle engines, power plants, refineries, and other industrial operations).² NO₂, a term often used interchangeably with NO_x, is a reddish-brown gas that can cause breathing difficulties at high levels. The entire Air Basin is designated as a non-attainment area for State and Federal NO₂ standards. The NO_x standard was not exceeded at the Costa Mesa station over the last five years.

On July 1, 1987, the EPA replaced the total suspended particulate (TSP) standard with a new particulate standard known as PM₁₀. PM₁₀ includes particulate matter 10 microns or less in diameter (a micron is one millionth of a meter). Sources of PM₁₀ include agricultural operations, industrial processes, combustion of fossil fuels, construction and demolition, and windblown dust and wildfires. The entire Air Basin is designated as a non-attainment area for State and Federal PM₁₀ standards. Particulates substantially reduce visibility and adversely affect the respiratory tract. As indicated in Table 4.4-1, some exceedances of State standards for PM₁₀ occurred at local air monitoring stations from 1997 through 2001, ranging from six to 15 times in a given year (state standards for PM_{2.5} [particulate matter 2.5 microns or less in diameter] did not exist during the monitoring period of 1997 through 2001 as shown in Table 4.4-1, *LOCAL AIR QUALITY LEVELS*).

Fine Particulate Matter

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Environmental Protection Agency Website, www.epa.gov/oar/aqtrnd97/brochure/no2.html.

It should be noted that on June 20, 2002, CARB adopted amendments for statewide annual ambient particulate matter air quality standards. The ambient annual PM₁₀ standard was lowered from 30 micrograms per cubic meter (Fg/m³) to 20 Fg/m³. As no ambient annual state standard existed for PM_{2.5}, a new annual standard was established at 12 Fg/m³. 24-hour average standards for both PM₁₀ and PM_{2.5} were retained. These standards were revised/established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State PM₁₀ standards during some parts of the year, and the statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging.³ Particulate matter impacts primarily effect infants, children, the elderly, and those with pre-existing cardiopulmonary disease.

Sulfur Dioxide and Lead

Sulfur dioxide (SO₂), often used interchangeably with sulfur oxides (SO_x), and lead (Pb) levels in all areas of the Air Basin do not exceed Federal or State standards. The SoCAB is designated as attainment for both State and Federal SO₂ standards. There is no NAAQS for lead. The Costa Mesa Station did not exceed State standards for SO_x during the last five years.

REGULATORY FRAMEWORK

Federal Clean Air Act of 1970 and 1990 Clean Air Act Amendments

The Federal Clean Air Act of 1970 (CAA) was the first legislation that gave the U.S. Environmental Protection Agency (EPA) authority to set federal primary and secondary ambient air quality standards. Primary or health-based standards are set at levels necessary to protect the public health. Secondary standards are set to protect the public from air pollution effects such as crop damage, visibility reduction, soiling, nuisances, etc. The resultant national ambient air quality standards (NAAQS) included six pollutants: CO (carbon monoxide), O₃ (ozone), PM₁₀ (fine particulate matter), NO₂ (nitrogen dioxide), SO₂ (sulfur dioxide), and Pb (lead). The Act required states that exceeded the NAAQS to prepare air quality plans showing how they would meet the standards by December 1987. The Act was amended in 1977 and again in 1990 to extend the deadline for compliance and to require that revised State Implementation Programs (SIPs) be prepared. The 1990 Clean Air Act Amendments established categories of air pollution severity for non-attainment areas ("marginal" to "extreme"). SIP requirements varied based on the degree of severity.

The 1988 California Clean Air Act (CCAA)

This legislation was signed into law on September 30, 1988, became effective on January 1, 1989, and was amended in 1992. Also known as the "Sher Bill" (Assembly Bill 2595), the CCAA observes the requirements of the Federal Clean Air Act and adds three other pollutants to be regulated, including: H₂S (hydrogen sulfide), SO (sulfates), and vinyl chloride. The CCAA established a legal mandate to achieve health-based State air quality standards at the earliest practicable date. The

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Staff Report: Public Hearing to Consider Amendments to the Ambient Air Quality Standards for Particulate Matter and Sulfates. California Environmental Protection Agency, Air Resources Board, May 3, 2002.

Act specified that districts focus particular attention on reducing the emissions from transportation and area-wide emission sources. Additionally, it also gives air districts such as the SCAQMD new authority to regulate indirect sources.

Each district plan is to achieve a five-percent annual reduction (averaged over consecutive three-year periods) in district-wide emissions of each non-attainment pollutant or its precursors including the effect of any additional development within the region. A strict interpretation of the CCAA “no net” increase prohibition suggests that any general development within the region, no matter how large or small, may have a significant, project-specific air quality impact unless the development-related emissions are offset by concurrent emissions reductions elsewhere within the airshed. Any planning effort for air quality attainment would thus need to consider both State and Federal planning requirements.

1997 Air Quality Management Plan

The SCAQMD has prepared multiple Air Quality Management Plans (AQMPs) to accomplish the five percent annual reduction goal. The most recent AQMP was published in 1997. To accomplish its task, the AQMP relies on a multi-level partnership of governmental agencies at the federal, state, regional and local level. These agencies (EPA, CARB, local governments, Southern California Association of Governments (SCAG), and the SCAQMD) are the cornerstones that implement the AQMP programs.

1997 AQMP. A 1997 AQMP was prepared by the SCAQMD and adopted by the District on November 15, 1996. The 1997 AQMP was then adopted by CARB on January 23, 1997. The 1997 Plan contains two tiers of control measures. Short and intermediate term measures are scheduled to be adopted between 1997 and the year 2005. These measures rely on known technologies and other actions to be taken by several agencies that currently have the statutory authority to implement the measures. They are designed to satisfy the Federal CAA requirement of Reasonably Available Control Technology (RACT) and the CCAA requirement of Best Available Retrofit Control Technology (BARCT). There are 37 stationary source and 24 mobile source control measures in this group.

The 1997 AQMP continues to include most of the control measures outlined in the previous 1994 Ozone Plan with minor exceptions, but postpones many marginal measures found to be less cost-effective, drops future indirect-source rules that are now deemed infeasible, and focuses the SCAQMD’s efforts on about ten major emission-reduction rules over the next two years. The SCAQMD will focus its efforts on seven major rules to reduce reactive organic compounds (ROC), a key ingredient in smog; and the Plan includes new market-based measures giving businesses greater flexibility in meeting emission-reduction requirements, such as intercredit trading and additional credits for mobile source emission reductions.

The 1997 AQMP shows that measures outlined in the 1994 Ozone Plan are more than sufficient to attain the Federal health standards for the two most difficult ingredients in smog, PM₁₀ and ground-level O₃, by the years 2006 and 2010, respectively. Although the AQMP states that the federal CO standard will be met by 2000, the SoCAB is still designated as a federal non-attainment

area (Orange County, however, is considered an attainment area for state CO standards). The region already has met the three other Federal health standards for Pb, SO₂, and NO₂.

To help reduce PM₁₀ pollution, the 1997 Plan outlines seven control measures for directly emitted particulates which will reduce emissions from agricultural areas, livestock wastes, wood-working operations, construction, and restaurants. The measures will also help control dust from paved and unpaved roads, which accounts for two-thirds of the directly-emitted particulates.

The 1997 Plan shows that both emissions and ambient pollution levels have continued their downward path toward healthful levels. The number of Stage I smog episodes for O₃ declined from 41 days in 1990 to just 14 days in 1995. CO also has declined, with the number of days over the standard down from 42 in 1990 to 13 in 1995. The average number of days exceeding the Federal 24-hour PM₁₀ standard also declined between 1990 and 1995 by 9 percent.⁴

1997 AQMP Control Strategies. The 1997 AQMP includes two tiers of emission reduction measures (short/intermediate and long-term measures), based on availability and readiness of technology. Short- and intermediate-term measures include the application of available technologies and management practices between 1994 and the year 2005. These short- and intermediate-term measures are designed to satisfy the Federal CAA requirement of RACT, and the CCAA requirements of BARCT.

To ultimately achieve ambient air quality standards, further development and refinement of known low- and zero-emission control technologies, in addition to technological breakthroughs, would be necessary. Long-term measures rely on the advancement of technologies and control methods that can reasonably be expected to occur between 1994 and 2010.

Because of the EPA's principal authority over many off-road sources, the 1997 AQMP's off-road mobile source control measures are based on the EPA's proposed Federal Implementation Plan (FIP) for the SoCAB. The FIP's proposed control measures are based on a combination of stringent emission standards, declining caps on emission levels and emission/user fees.

In December, 1999 the SCAQMD amended the 1997 AQMP. The 1999 Amendment provides revisions to the ozone portion of the 1997 AQMP specifically in the area of short-term stationary source control measures. In addition, the Amendment revises the adoption and implementation schedule for the short-term stationary source control measures that AQMD is responsible to implement. The 1999 Amendment does not revise the PM₁₀ portion of the 1997 AQMP, emission inventories, the mobile source portions of the 1997 Ozone SIP Revision, or the ozone attainment demonstration. Specifically, the 1999 Amendment:

- ~ Includes new short-term stationary source control measures;

⁴ Article entitled "AQMD Sees Progress in Attaining Federal Clean Air Standards, " *AQMD Advisor*, Volume 3, Number 7, September 1996.

- ~ Revises the adoption/implementation schedule for 13 short-term volatile organic compounds (VOCs), nitrogen oxides (NO_x), and stationary source control measures from the 1997 Ozone SIP Revision;
- ~ Provides further VOC emission reductions in the near-term; and
- ~ Revises the emission reduction commitments for the long-term control measures in the 1997 Ozone SIP Revision for long-term stationary source control measures that the SCAQMD is responsible to implement.

SENSITIVE RECEPTORS

Sensitive populations (sensitive receptors) are more susceptible to the effects of air pollution than the general population. Sensitive populations who are in proximity to localized sources of toxins and CO are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Existing sensitive receptors are not located on or adjacent to the project site; however, Ocean View Mobile Home Park exists to the south while Huntington Central Library is located to the north. In addition, a sports complex is currently being constructed adjacently north and west of the subject site.

TOXIC AIR CONTAMINANTS (TACS)

TACs, often termed “non-criteria”, do not have established ambient air standards. SCAQMD implements TAC controls through Federal, State and local programs. Federally, TACs are regulated by EPA under Title III of the Federal CAA. At the State level, the ARB has designated all 189 federal hazardous air pollutants as TACs, under the authority of AB 1807. The Air Toxins Hot Spots Information and Assessment Act (AB 2588) requires inventories and public notices for facilities that emit TACs. SB 1731 amended AB 2588 to require facilities with “significant risks” to prepare a risk reduction plan (reflected in SCAQMD Rule 1402). SCAQMD also regulates source-specific TACs.

IMPACTS

Significance Criteria

Significance thresholds in this Section are based on the CEQA Guidelines (Environmental Checklist Form) and the South Coast Air Quality Management District (SCAQMD) *CEQA Air Quality Handbook* as indicated below.

A potentially significant impact to air quality would occur if the project caused one or more of the following to occur:

- ~ conflict with or obstruct implementation of the applicable air quality plan;

- ~ violation of any air quality standard or substantial contribution to an existing or projected air quality standard;
- ~ a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- ~ exposure of sensitive receptors to substantial pollutant concentrations; and/or
- ~ the creation of objectionable odors affecting a substantial number of people.

The SCAQMD *CEQA Air Quality Handbook* provides significance thresholds for both construction and operation of projects within the SCAQMD jurisdictional boundaries. These thresholds are identified in Tables 4.4-2 through 4.4-6.

Projects in the SoCAB with daily or quarterly thresholds which exceed any of the above emission thresholds should be considered significant.

The significance of localized project impacts depends on whether ambient CO levels in the vicinity of the project are above or below State and Federal CO standards. If the project causes an exceedance of either the state one-hour or eight-hour CO concentrations, the project would be considered to have a significant local impact. If ambient levels already exceed a state or federal standard, then project emissions would be considered significant if they increase one-hour CO concentrations by 1.0 ppm or more, or eight-hour CO concentrations by 0.45 ppm or more.

SHORT-TERM EMISSIONS

Less than significant, short-term impacts on air quality would occur during the remediation, grading and construction activities required to implement the proposed project. These temporary impacts would include:

- ~ Particulate (fugitive dust) emissions from remediation, construction, grading and clearing activities on-site;
- ~ Exhaust emissions and potential odors from the construction equipment used on-site as well as the vehicles used to transport materials to and from the sites; and
- ~ Exhaust emissions from the motor vehicles of the construction crew.

Table 4.4-2
Construction Emissions Thresholds

Pollutant	Construction Emissions Threshold	
	Quarterly	Daily
Reactive Organic Compounds	2.5 tons	55 pounds
Nitrogen Oxides	2.5 tons	55 pounds
Carbon Monoxide	24.75 tons	550 pounds
Fine Particulate Matter	6.75 tons	150 pounds
Sulfur Oxides	6.75 tons	150 pounds

Fugitive Dust Emissions

Remediation and construction operations associated with implementing the proposed project would generate fugitive dust emissions. Fugitive dust may be a nuisance to those living and working in the project vicinity. The primary sources of construction-related dust emissions are grading and excavation operations, road construction and building construction.

Fugitive dust from demolition, remediation, grading and construction of an interim or long-term recreational/open space use is expected to be short-term and would cease following project completion. Most of this material is inert silicates, rather than the complex organic particulates released from combustion sources, which are more harmful to health. Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. The amount of PM₁₀ (particulate matter smaller than 10 microns) generated as a part of fugitive dust emissions is of particular concern to health. As previously discussed, PM₁₀ poses a serious health hazard, alone or in combination with other pollutants. The URBEMIS 2001 computer model calculates PM₁₀ fugitive dust as part of the site remediation/construction emissions. As shown in Table 4.4-3, *DAILY CONSTRUCTION EMISSIONS*, neither the demolition/remediation process or subsequent construction of a recreational/open space use would exceed the established SCAQMD PM₁₀ threshold, with implementation of recommended mitigation measures (making a conservative assumption that up to 2.5 acres would be under disturbance at any one time).

Remediation/Construction Grading and Hauling. The remediation and construction phases of the proposed project would involve grading and hauling of contaminated materials. The remedial process may require excavation and handling of lead-contaminated soils. In addition, the project site exists over a former landfill operated by the County of Orange until 1962. The proposed project will also most likely require over-excavation and recompaction in order to create a surface suitable for open space/recreation use, which may require exporting/importing of fill material. It should be noted that the remediation/construction process would not disturb landfill materials situated beneath the former gun range facility. Although these activities will create additional dust and PM₁₀ (as well as other related truck emissions), it would be mitigated to less than significant levels through implementation of standard dust control practices required as part of the grading permit (periodic

Table 4.4-3

DAILY CONSTRUCTION EMISSIONS (ALTERNATIVE 2)

Pollutant	Total project Emissions (lbs/day)	SCAQMD Thresholds (lbs/day)	Threshold Exceeded? Yes/No
Carbon Monoxide (CO)	6.3	550	No
Reactive Organic Gases (ROG)	12.4	55	No
Nitrogen Oxides (NOx)	127.4	55	Yes
Fine Particulate Matter (PM10)	37.8	150	No

ROG = reactive organic gases

NOx = nitrogen oxides

CO = carbon monoxide

PM₁₀ = fine particulate matter

¹ Emissions calculated using the URBEMIS 2001 Computer Model as recommended by the SCAQMD.

² Calculations include emissions from numerous sources including: site grading, construction worker trips, stationary equipment, diesel mobile equipment, and asphalt off-gassing.

³ Refer to Appendix D, *AIR QUALITY DATA*, for assumptions used in this analysis.

site watering, covering laden trucks with tarps, and periodic street sweeping). It should be noted that all such mitigation measures would be applicable to both the demolition/remediation process as well as subsequent construction of an interim or long-term recreational/open space use.

Remediation/Construction Equipment Emissions

In addition to impacts resulting from dust generation, remediation/construction equipment exhaust would also contribute to short-term air quality impacts. Primary sources of short-term ROG and NO_x emissions are gasoline and diesel-powered heavy-duty mobile construction equipment. The majority of the equipment used today is diesel-powered (approximately 90 percent of the heavy construction machinery), which tends to be more efficient than gasoline-powered equipment, producing lower CO and hydrocarbon emissions. However, diesel engines emit much higher amounts of NO_x, SO_x, and particulates per hour of activity.

Exhaust from heavy-duty equipment is difficult to quantify because of the day-to-day variability in construction activities and equipment used. As remedial operations would be similar to activities performed on a typical construction site (demolition, excavation, grading, implementation of asphalt), model defaults from the URBEMIS 2001 computer model were used to quantify short-term emissions from construction equipment for the project. Truck trip generation for RAP Alternative 2 was based on the hauling of 2,241 cubic yards of wooden posting (187 truck trips at 12 cubic yards per truck) and 293 cubic yards of asphalt (24 truck trips at 12 cubic yards per truck) for a total of 211 truck trips.

Emissions for RAP Alternative 2 (the recommended remedial option) are shown in Table 4.4-3. As shown in this table, project demolition/remediation and subsequent construction of an interim or long-term recreational/open space use would not exceed the SCAQMD emissions thresholds for CO, ROG, or PM₁₀. However, project-related emissions for NO_x would exceed the SCAQMD

standard of 55 pounds per day. Short-term impacts in regards to NO_x are considered an unavoidable significant impact. Calculations within Table 4.4-3 for RAP Alternative 2 are based on the worst-case assumption that only partial on-site reuse of soils would occur, and that a portion of contaminated soils from the site would be transported off-site to a licensed landfill. However, it should be noted that even if all soils were remediated to meet regulatory thresholds and reused on-site (thus eliminating off-site transport of soils), an unavoidable significant impact for NO_x would still occur, as project emissions for site excavation/grading alone would be approximately 93.1 pounds per day.

LONG-TERM EMISSIONS

Long-term air emissions consist of mobile source emissions generated from project-related traffic, and stationary source emissions generated directly from on-site activities and indirectly from electricity and natural gas consumption. Stationary sources of long-term air emissions include equipment and vehicles on the site, as well as indirect emissions from electricity and natural gas consumption.

Energy Emissions

The proposed project would create a nominal increase in demand for electrical energy, which is generated from power plants utilizing fossil fuels. Electric power generating plants are distributed throughout the SoCAB, and their emissions contribute to the total regional pollution burden. The primary use of natural gas by the project would be for combustion to produce space heating, water heating and other miscellaneous heating or air conditioning. Refer to Table 4.4-4, *ENERGY EMISSIONS*, which lists the energy consumption emission factors for the proposed project. Given the scope and nature of the proposed project, Impacts in regards to long-term energy emissions are not anticipated to be significant.

Vehicle Emissions

Motor vehicles would constitute the primary source of pollutant emissions associated with the proposed project. As outlined in Table 4.4-5, *MOBILE SOURCE AIR EMISSIONS*, the estimated long-term emissions from mobile sources do not exceed any of the SCAQMD thresholds. The emission factors for the proposed project were determined by trip generation rates provided by the City. Due to the motor vehicle emissions control programs, emission rates from the motor vehicles in Southern California are lower each year. However, the net emissions are increasing in the SoCAB due to increases in the number of motor vehicles associated with growth. Impacts as a result of the proposed project in regards to vehicle emissions are not anticipated to be significant.

Combined Air Emissions

The combined vehicle emissions and energy emissions would result in the following estimated daily pollutant generation upon build-out: 14.60 pounds of carbon monoxide (CO), 1.76 pounds of nitrogen oxides (NO_x), 0.78 pounds of PM_{10} (including stationary source particulates), and 1.66

Table 4.4-4
ENERGY EMISSIONS

(stationary sources)

Pollutant	Stationary Source Emissions (lbs/day)	SCAQMD Thresholds (lbs/day)	Threshold Exceeded? Yes/No
Carbon Monoxide (CO)	0.69	550	No
Reactive Organic Compounds (ROC)	0.10	55	No
Nitrogen Oxides (NOx)	0.01	55	No
Fine Particulate Matter (PM10)	0.00	150	No

ROG = reactive organic gases

NOx = nitrogen oxides

CO = carbon monoxide

PM₁₀ = fine particulate matter

¹ Emissions calculated using the URBEMIS 2001 Computer Model as recommended by the SCAQMD.

² Refer to Appendix D, *AIR QUALITY DATA*, for assumptions used in this analysis.

**Table 4.4-5
MOBILE SOURCE AIR EMISSIONS**

Pollutant	Mobile Source Emissions (lbs/day)	SCAQMD Thresholds (lbs/day)	Threshold Exceeded? Yes/No
Carbon Monoxide (CO)	13.91	550	No
Reactive Organic Compounds (ROC)	1.56	55	No
Nitrogen Oxides (NOx)	1.75	55	No
Fine Particulate Matter (PM10)	0.78	150	No

ROG = reactive organic gases

NOx = nitrogen oxides

CO = carbon monoxide

PM₁₀ = fine particulate matter

¹ Emissions calculated using the URBEMIS 2001 Computer Model as recommended by the SCAQMD.

² Refer to Appendix D, *AIR QUALITY DATA*, for assumptions used in this analysis.

pounds of reactive organic compounds (ROC) (refer to Table 4.4-6 *COMBINED AIR EMISSIONS*). These levels do not exceed SCAQMD operation emissions thresholds; therefore, less than significant long-term air quality impacts would result, and no special mitigation is required other than standard design features.

CONSISTENCY WITH REGIONAL PLANS

Although the project would represent an incremental negative impact to air quality in the SoCAB, of primary concern is that project-related impacts have been properly anticipated in the regional air quality planning process and reduced whenever feasible. Therefore, it is necessary to assess the project's consistency with the AQMP.

**Table 4.4-6
 COMBINED AIR EMISSIONS**

Pollutant	Total project Emissions (lbs/day)	SCAQMD Thresholds (lbs/day)	Threshold Exceeded? Yes/No
Carbon Monoxide (CO)	14.60	550	No
Reactive Organic Compounds (ROC)	1.66	55	No
Nitrogen Oxides (NOx)	1.76	55	No
Fine Particulate Matter (PM10)	0.78	150	No

ROG = reactive organic gases
 CO = carbon monoxide

NOx = nitrogen oxides
 PM₁₀ = fine particulate matter

¹ Emissions calculated using the URBEMIS 2001 Computer Model as recommended by the SCAQMD.

² Refer to Appendix D, *AIR QUALITY DATA*, for assumptions used in this analysis.

The project site is within the Open Space-Park (OS-P) land use category of the General Plan and is zoned Open Space-Parks and Recreation (OS-PR). Project implementation would not conflict with the City of Huntington Beach General Plan or Zoning Ordinance designations. Accordingly, air quality emissions and related impacts for open space/recreation uses have been planned for by the City.

SCAG is responsible under the Federal CAA for determining conformity of projects, plans and programs with the SCAQMD AQMP. SCAG released the Regional Comprehensive Plan and Guide (RCPG, May 1995). The RCPG is a compilation of the summaries of Plans for the Southern California Region. It establishes a broad set of goals for the region, and identifies strategies for agencies at all levels to use in guiding their decision-making toward implementation of the proposals.¹ The Growth Management and Regional Mobility Chapters contain policies to help guide local agencies in developing a more balanced number of houses and jobs.

Prior to adoption of portions of the RCPG, formal AQMP Conformity Review Procedures were provided by SCAG for local agencies to follow when determining consistency of projects with the AQMP. These guidelines were primarily based on a project's influence on the subregional jobs/housing balance. Since adoption of the RCPG, SCAG released the Intergovernmental Review Procedures Handbook dated June 1, 1995, which states that project consistency with the RCPG policies, particularly the core chapters, should be analyzed to determine project consistency

¹ *Regional Comprehensive Plan and Guide*, Southern California Association of Governments, May 1995, page 1.

with regional growth and air quality documents. Core chapters include Growth Management, Regional Mobility, Air Quality, Hazardous Waste and Water Quality.

Policies within these chapters of the RCPG are aimed at SCAG's overall goals to: 1) reinvigorate the region's economy, 2) avoid social and economic inequities and the geographical isolation of communities and 3) maintain the region's quality of life. Selected policies include the following:

- ~ "SCAG shall encourage existing or proposed local jurisdictional programs aimed at designing land uses which encourage the use of transit and thus reduce the need of roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk or bike."
- ~ "SCAG shall encourage local jurisdictional plans that maximize the use of existing urbanized areas accessible to transit through infill and redevelopment."
- ~ "SCAG shall support local plans to increase density of future development located at strategic points along the regional commuter rail, transit centers and activity centers."
- ~ "SCAG shall encourage efforts of local jurisdictions in the implementation of programs that increase the supply and quality of housing and provide affordable housing as evaluated in the Regional Housing Needs Assessment."

Although air quality is a regional problem, SCAG's RCPG and SCAQMD's AQMP place a heavy reliance on local implementation measures, such as land use decisions and local employment transportation programs. The implementation process stresses the freedom of cities to choose attainment measures that best suit local conditions.

As indicated in SCAQMD's *CEQA Air Quality Handbook*, there are two main indicators of consistency:

- ~ Whether the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP; and
- ~ Whether the project would exceed the AQMP's assumptions for 2010 or increments based on the year of project build-out and phase.

The proposed project does not involve a General Plan Amendment, zone change, or other change in land use. Therefore, the project would be consistent with the City of Huntington Beach land use assumptions. Since the AQMP is based on the City's General Plan assumptions, and since the proposed project is consistent with these General Plan assumptions, the project would be considered consistent with the AQMP land use assumptions and goals. Based on the above, the project is considered consistent with regional plans, and is considered to have no impact.

SENSITIVE RECEPTORS

Sensitive receptors in the project vicinity include the Ocean View Mobile Home Park located to the south and Huntington Central Library to the north. In addition, a sports complex is under construction immediately adjacent north and west of the subject site. The long-term impacts from mobile sources and energy consumption are not considered significant; therefore, a significant impact to sensitive receptors is not expected. Project remediation, grading, and construction activities would not impact sensitive receptors in the project vicinity due to the distance between the site and these receptors.

MITIGATION MEASURES

SHORT-TERM EMISSIONS

AIR-1 Prior to the issuance of grading permits or approval of grading plans, the City shall include a dust control plan as part of the construction contract standard specifications, which shall include measures to meet the requirements of the City and SCAQMD Rules 402 and 403. Such measures may include, but are not limited to, the following:

During grading operations, the following shall be complied with:

- 1) Attempt to phase and schedule activities to avoid high-ozone days and first-stage smog alerts.
- 2) Discontinue operation during second-stage smog alerts.
- 3) All haul trucks shall be covered prior to leaving the site to prevent dust from impacting the surrounding areas.
- 4) Comply with AQMD Rule 403, particularly to minimize fugitive dust and noise to surrounding areas.
- 5) Wind barriers shall be installed along the perimeter of the site.
- 6) Moisten soil each day prior to commencing grading to depth of soil cut.
- 7) Water exposed surfaces at least twice a day under calm conditions and as often as needed on windy days when winds are less than 25 mile per day or during very dry weather in order to maintain a surface crust and prevent the release of visible emissions from the construction site.
- 8) Treat any area that will be exposed for extended periods with a soil conditioner to stabilize soil or temporarily plant with vegetation.
- 9) Wash mud-covered tires and under carriages of trucks leaving construction sites.
- 10) Provide for street sweeping, as needed, on adjacent roadways to remove dirt dropped by construction vehicles or mud which would otherwise be carried off by trucks departing project sites.
- 11) Securely cover all loads of fill coming to the site with a tight fitting tarp.
- 12) Cease grading during periods when winds exceed 25 miles per hour.

- 13) Provide for permanent sealing of all graded areas, as applicable, at the earliest practicable time after soil disturbance.
- 14) Maintain construction equipment in peak operating condition so as to reduce operating emissions.
- 15) Use low-sulfur diesel fuel in all equipment.
- 16) Use electric equipment whenever practicable.
- 17) Shut off engines when not in use.

LONG-TERM EMISSIONS

None required.

CONSISTENCY WITH REGIONAL PLANS

None required.

SENSITIVE RECEPTORS

None required.

UNAVOIDABLE SIGNIFICANT IMPACTS

The proposed project may have unavoidable significant impacts in regards to temporary, short-term emissions for NO_x. This unavoidable significant impact is anticipated to occur for the duration of the remediation, demolition, and construction process (expected to last approximately 12 to 18 months).

4.5 NOISE

This section addresses potential noise impacts from project construction, traffic and operations. This section is based on the City of Huntington Beach General Plan (1996), the City of Huntington Beach General Plan EIR (1995), the City's "Transportation System Needs Analysis 2000-2010", as well as additional project traffic data provided by the City.

EXISTING CONDITIONS

Noise Environment

The primary noise sources in the project vicinity include numerous industrial uses and noise from adjacent local roadways. Both mobile and stationary noise sources contribute to the existing noise levels at the project site. Mobile noise sources consist mainly of car and truck traffic, while stationary noise sources include the Hanson Recycling Center to the northeast and Orange County Transfer Station to the east. The Central Park Master EIR includes Community Noise Equivalent Level (CNEL) measurements from four locations surrounding the project site. These locations include the Ocean View Mobile Home Park (CNEL of 59 dBA), the west side of Goldenwest Street (CNEL of 67 dBA), the Huntington Central Library parking lot (CNEL of 59 dBA), and the west side of Gothard Street (CNEL of 72 dBA).

Noise Scales and Definitions

Sound is technically described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In general, a 1 dB change in the sound pressure levels of a given sound is detectable only under laboratory conditions. A 3 dB change in sound pressure level is considered a "just detectable" difference in most situations. A 5 dB change is readily noticeable and a 10 dB change is considered a doubling (or halving) of the subjective loudness. It should be noted that, generally speaking, a 3 dBA increase or decrease in the average traffic noise level is realized by a doubling or halving of the traffic volume; or by about a 7 mile per hour (mph) increase or decrease in speed.

For each doubling of distance from a point noise source (a stationary source, such as a loudspeaker or loading dock), the sound level will decrease by 6 dBA. In other words, if a person is 100 feet from a machine, and moves to 200 feet from that source, sound levels will drop approximately 6 dBA. For each doubling of distance from a line source, like a roadway, noise levels are reduced by 3 to 4.5 dBA, depending on the ground cover between the source and the receiver. In terms of human response to noise, a sound 10 dBA higher than another is judged to be twice as loud; 20 dBA higher four times as loud; and so forth. Everyday sounds normally range

from 30 dBA (very quiet) to 100 dBA (very loud). Examples of various sound levels in different environments are shown in Table 4.5-1, *SOUND LEVELS AND HUMAN RESPONSE*.

There are three methods used to measure sound over a period of time: the Community Noise Equivalent Level (CNEL), the equivalent energy level (Leq) and the Day/Night Average Sound Level (Ldn). The City of Huntington Beach utilizes all three methods. The predominant community noise rating scale used in California for land use compatibility assessment is the Community Noise Equivalent Level (CNEL). The CNEL reading represents the average of 24 hourly readings of equivalent levels, known as Leq's, based on an A-weighted decibel with upward adjustments added to account for increased noise sensitivity in the evening and night periods. These adjustments are +5 dBA for the evening (7 p.m. to 10 p.m.), and +10 dBA for the night (10 p.m. to 7 a.m.). CNEL may be indicated by "dBA CNEL" or just "CNEL".

The Leq is the sound level containing the same total energy over a given sample time period. The Leq can be thought of as the steady (average) sound level which, in a stated period of time, would contain the same acoustic energy as the time-varying sound level during the same period. Leq is typically computed over 1, 8 and 24-hour sample periods.

Another commonly used method is the day/night average level or Ldn. The Ldn is a measure of the 24-hour average noise level at a given location. It was adopted by the U.S. Environmental Protection Agency (EPA) for developing criteria for the evaluation of community noise exposure. It is based on a measure of the average noise level over a given time period called the Leq. The Ldn is calculated by averaging the Leq's for each hour of the day at a given location after penalizing the "sleeping hours" (defined as 10 p.m. to 7 a.m.), by a 10 dBA to account for the increased sensitivity of people to noises that occur at night. The maximum noise level recorded during a noise event is typically expressed as Lmax. The sound level exceeded over a specified time frame can be expressed as Ln (i.e., L90, L50, L10, etc.). L50 equals the level exceeded 50 percent of the time.

Noise Sensitive Receptors

Land uses considered sensitive receptors to noise include residential areas, schools, hospitals, churches, recreational areas, office buildings and transient lodging.

Residential areas are also considered noise sensitive, particularly during the nighttime hours. The site is located adjacent to primarily open space areas and industrial uses. Sensitive receptors in the project vicinity include the Ocean View Mobile Home Park, located approximately 750 feet southwest of the project site, and the Huntington Central Library, situated approximately 900 feet north of the subject site.

Table 4.5-1
SOUND LEVELS AND HUMAN RESPONSE

NOISE SOURCE	dB(A) Noise Level	RESPONSE
	150	
Carrier Jet Operation	140	Harmfully Loud
	130	Pain Threshold
Jet Takeoff (200 ft.) Discotheque	120	
Unmuffled Motorcycle Auto Horn (3 ft.) Rock'n Roll Band Riveting Machine	110	Maximum Vocal Effort Physical Discomfort
Loud Power Mower Jet Takeoff (2000 ft.) Garbage Truck	100	Very Annoying Hearing Damage (Steady 8-Hour Exposure)
Heavy Truck (50 ft.) Pneumatic Drill (50 ft.)	90	
Alarm Clock Freight Train (50 ft.) Vacuum Cleaner (10 ft.)	80	Annoying
Freeway Traffic (50 ft.)	70	Telephone Use Difficult
Dishwashers Air Conditioning Unit (20 ft.)	60	Intrusive
Light Auto Traffic (100 ft.)	50	Quiet
Living Room Bedroom	40	
Library Soft Whisper (15 ft.)	30	Very Quiet
Broadcasting Studio	20	Just Audible
	10	Threshold of Hearing
Source: Melville C. Branch and R. Dale Beland, <u>Outdoor Noise in the Metropolitan Environment</u> , 1970 (p. 2), and others.		

Noise Standards

It is difficult to specify noise levels which are generally acceptable to everyone. What is annoying to one person may be unnoticed by another. Standards may be based on documented complaint activity in response to documented noise levels, or based on studies on the ability of people to sleep, talk, or work under various noise conditions. All such studies, however, recognize that individual responses vary considerably. Standards usually address the needs of most of the general population. With this caution in mind, noise standards for planning purposes examine both outdoor and indoor noise levels acceptable for different uses. The standards relate to existing conditions in the City so that they are realistically enforceable and consistent with the City's General Plan objectives.

The Federal government specifically preempts local control of noise emissions from interstate highways, railroads and aircraft. The State of California has established guidelines for acceptable community noise levels which are based on the CNEL rating scale. The guidelines rank noise land use compatibility in terms of "normally acceptable," "conditionally acceptable," and "clearly unacceptable" noise levels for various land use types. As shown in Table 4.5-2, *LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS*, single-family homes are "normally acceptable" in exterior noise environments up to 60 CNEL and "conditionally acceptable" up to 70 CNEL. Multiple-family residential uses are "normally acceptable" up to 65 CNEL and "conditionally acceptable" up to 70 CNEL. Schools, libraries and churches are "normally acceptable" up to 70 CNEL, as are office buildings and business, commercial and professional uses. As indicated in Table 4.5-2, many noise-sensitive land uses such as residential areas, schools, churches, hospitals, etc., use a daily noise level value of 70 dBA as the dividing line between a "conditionally acceptable" and a "normally acceptable" noise environment.

In addition to Federal and State noise standards, the City of Huntington Beach has adopted noise objectives and policies in its General Plan. These noise objectives and policies pertain to land use impacts, mobile noise sources, and stationary noise sources. The City's Municipal Code sets standards for interior and exterior noise levels. In general, the exterior living areas (yards and patios) of residences should not exceed 55 dBA CNEL from 7 a.m. to 10 p.m. The California Noise Insulation Standard (California Administrative Code, Title 25, Chapter 1, Subchapter 1, Article 4) requires that indoor noise levels in multi-family residences do not exceed a CNEL of 45 dBA.

Local agencies may regulate noise levels of most sources not regulated by the Federal government; may provide standards for insulation of noise receivers either within the structure or by placement of noise barriers such as walls; and, through land use decisions, may reduce noise impacts by separating noise generators from noise sensitive uses. To provide a satisfactory noise environment and to minimize complaints about community noise, the City has adopted standards for evaluating the compatibility of land uses with respect to outdoor and certain indoor noise levels. The purpose of the land use compatibility analysis is to screen projects which may require specific design considerations to mitigate noise impacts. The General Plan's noise exposure contours are used in conjunction with the noise standards indicated on Table 4.5-2, *LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS*, to make such a determination.

Table 4.5-2
LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE Ldn or CNEL dBA			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential - Low Density	50 - 60	55 - 70	70 - 75	75 - 85
Residential - Multiple Family	50 - 65	60 - 70	70 - 75	75 - 85
Transient Lodging - Motel, Hotels	50 - 65	60 - 70	70 - 80	80 - 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 - 70	60 - 70	70 - 80	80 - 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 - 70	65 - 85	NA
Sports Arenas, Outdoor Spectator Sports	NA	50 - 75	70 - 85	NA
Playgrounds, Neighborhood Parks	50 - 70	NA	67.5 - 75	72.5 - 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 - 75	NA	70 - 80	80 - 85
Office Buildings, Business Commercial and Professional	50 - 70	67.5 - 77.5	75 - 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	75 - 85	NA

Source: Office of Noise Control, California Department of Health, as cited in the City of Huntington Beach General Plan EIR, 1995, Figure N-1.

Notes:

NORMALLY ACCEPTABLE
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

CONDITIONALLY ACCEPTABLE
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice. Outdoor environment will seem noisy.

NORMALLY UNACCEPTABLE
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements needed to mitigate the unacceptable noise levels must be made and needed noise insulation features must be included in the design. Outdoor areas must be shielded.

CLEARLY UNACCEPTABLE
New construction or development clearly should not be undertaken. Construction costs to make the indoor environment acceptable would be prohibitive and the outdoor environment would not be useable.

NA: Not applicable.

IMPACTS

Significance Criteria

A project is considered to have a significant noise impact where it causes an adopted noise standard to be exceeded for the project site or for adjacent affected sensitive receptors. In addition to being concerned about the absolute noise level that might occur when a new source is introduced into an area, it is also important to consider the existing noise environment. If the existing noise environment is quiet and the new noise source greatly increases the noise exposure, even though a criterion level might not be exceeded, some impact may occur. Lacking adopted standards for evaluating such impacts, general rules of thumb for community noise environments are that a change of over 5 dBA is readily noticeable and, therefore is considered a significant impact.¹ Changes from 3 to 5 dBA may be noticed by some individuals and are therefore considered to constitute an adverse environmental impact since under these conditions sporadic complaints may occur. Changes in community noise levels of less than 3 dBA are normally not noticeable and are therefore considered less than significant.² Adverse impacts would result if increases in noise levels are audible (increases equal to, or greater than 3 dBA), although the noise level may not exceed the significant impact criteria specified above. It should be noted that, for traffic-related noise impacts on arterial streets (of 20,000 daily trips or more), it requires a traffic increase of approximately 5,000 daily trips to increase the CNEL by one dBA.

According to the City of Huntington Beach Municipal Code (Chapters 8.40.050 and 8.40.070), the maximum permissible sound pressure level measured at the property boundary should not exceed 55 dBA between the hours of 7:00 a.m. and 10:00 p.m., and should not exceed 50 dBA between the hours of 10:00 p.m. and 7:00 a.m. Interior noise levels should not exceed 55 dBA between the hours of 7:00 a.m. and 10:00 p.m., and should not exceed 45 dBA between the hours of 10:00 p.m. and 7:00 a.m.

The State of California has established guidelines for acceptable community noise levels based on the CNEL rating scale (refer to Table 4.5-2, *LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS*).

According to the City of Huntington Beach Municipal Code (Chapters 8.40.050 and 8.40.070), the maximum permissible sound pressure level measured at the property boundary should not exceed 55 dBA between the hours of 7:00 a.m. and 10:00 p.m., and should not exceed 50 dBA between the hours of 10:00 p.m. and 7:00 a.m. Interior noise levels should not exceed 55 dBA between the hours of 7:00 a.m. and 10:00 p.m., and should not exceed 45 dBA between the hours of 10:00 p.m. and 7:00 a.m.

SHORT-TERM CONSTRUCTION

The proposed project would involve the remediation and demolition of the existing gun range facility and the construction of facilities typical of an open space/recreation area. Proposed on-site

¹ Assessment of Noise with Respect to Community Response, ISDR 1996, International Standardization, Switzerland.

² Fundamentals and Abatement of Highway Traffic Noise, Bolt, Beranek and Newman, 1973.

facilities may include parking areas, restrooms/concession structures, irrigation, lighting, and various utilities. Implementation of site demolition and remediation is expected to take approximately six months. A phasing schedule for subsequent interim/long-term park facility implementation has not been determined. Construction could take place immediately after the completion of site remediation, and would require an estimated additional six months to complete (depending on the nature of facilities). During the project implementation process, adjacent receptors would be exposed to sporadic high noise levels associated with demolition and construction activities (as a result of power tools, jack-hammers, wood shredding/chipping machinery, truck noise, etc.).

As stated above, the Ocean View Mobile Home Park is located approximately 750 feet southwest of the project site while the Huntington Central Library is situated approximately 900 feet north of the subject site. These sensitive receptors are located within an industrial area, and are typically exposed to noise generated by the Hanson rock-crushing facility and area traffic. Due to the relatively small scale of the project, the more intense remediation, demolition, and construction noise would be short-term in nature, and all construction-related noise would comply with applicable City standards. Any off-site remediation/construction truck traffic would utilize the existing access road located off of Gothard Street. This road is currently used by trucks to access the Hanson Recycling Center. Given this information, a temporary increase in noise levels from remediation, demolition, and construction is expected to be less than significant with implementation of standard construction practices.

LONG-TERM STATIONARY SOURCES

The proposed project involves the remediation of the existing gun range facility and the development of a recreational/open space extension of Huntington Central Park. The project site exists within an industrial area, with the Hanson Recycling Center and Orange County Transfer Station located adjacent to the site. Implementation of the project would involve additional traffic, increased site usage, and other operational parameters, and may therefore increase the ambient level of on-site noise from both mobile and stationary sources. An increase in employee/public traffic volumes would generate an increase in the noise levels from mobile sources (see discussion below). Potential on-site facilities include parking areas, restrooms/concession structures, irrigation, lighting, and various utilities. Noise may be generated from proposed stationary sources associated with facility operations, including parking lot noise, recreational activity, water pumps, boilers, compressors, and air conditioning system components. It should be noted, however, that the facility is proposed to occur in an open space/park setting and, as such, would be designed to minimize any unnecessary stationary noise sources. Any pumps, compressors or other stationary equipment would be relatively moderate in scale and are not otherwise anticipated to generate significant noise impacts. Any air conditioning compressors on-site will incorporate sufficient sound attenuation measures in order to meet City noise standards.

The increase in on-site noise levels from stationary sources associated with long-term recreational use is not anticipated to result in a noticeable increase in the ambient noise level. When considering the scope and nature of the proposed project, impacts in this regard are anticipated to be less than significant.

MOBILE SOURCES

The proposed open space/park project is not anticipated to generate a significant amount of noise from mobile sources. Trip generation for the former gun range facility prior to its closure in 1997 has been estimated to be approximately 500 vehicles per day, with an AM and PM peak hour trip generation of approximately 50 vehicles per hour.³ In comparison, estimated trip generation for potential future interim and long-term use is significantly lower, ranging from approximately 60-100 trips generated per day.⁴ The lower number of trips generated from future use will result in significantly lower noise generation from mobile sources, thereby resulting in less than significant impacts. Even in terms of an absolute comparison between the existing inactive facility and potential future recreational use (ignoring past traffic from the former gun range), the project would represent less than a ½ dBA CNEL increase on adjacent streets (it would require approximately a 5,000 ADT increase to raise noise levels by one dBA CNEL).

MITIGATION MEASURES

SHORT-TERM CONSTRUCTION

- NOI-1 Prior to the issuance of any grading permits, the City shall ensure evidence acceptable to the City of Huntington Beach Departments of Planning and Public Works that:
- ~ All construction vehicles or equipment, fixed or mobile, operated within 1,000 feet of a dwelling shall be equipped with properly operating and maintained mufflers.
 - ~ All operations shall comply with the City of Huntington Beach Municipal Code Chapter 8.40 (Noise Control).
 - ~ Stockpiling and/or vehicle staging areas shall be located as far as practicable from residential areas.
 - ~ Notations in the above format, appropriately numbered and included with other notations on the front sheet of grading plans, will be considered as adequate evidence of compliance with this condition.
- NOI-2 Should the project requiring off-site import/export of fill material during remediation/construction, trucks shall utilize a route that is least disruptive to sensitive receptors, preferably Gothard to Talbert to Beach to I-405. Construction trucks shall be prohibited from operating on Saturdays, Sundays, and federal holidays.
- NOI-3 To reduce project-related construction noise impacts generated by the proposed project, the following conditions shall be implemented:
- ~ Construction activities shall be limited to hours specified by the City Noise Ordinance; and

³ Per letter received from City of Huntington Beach, "Trip Generation Estimate for Gun Range at Huntington Central Park", February 22, 2001.

⁴ Per letter received from City of Huntington Beach, "Trip Generation for Hanson's Recycling and Dog Park Scenario", April 24, 2001.

- ~ Unnecessary idling of internal combustion engines shall be prohibited.

LONG-TERM STATIONARY SOURCES

None required.

MOBILE SOURCES

None required.

UNAVOIDABLE SIGNIFICANT IMPACTS

None have been identified.

4.6 PUBLIC SERVICES AND UTILITIES

Public services include services such as fire protection, police protection, schools, libraries and parks. Utilities include wastewater, water, solid waste, electricity, gas, telephone, and cable. The purpose of this section is to establish existing conditions for each provider, identify potentially significant impacts and recommend mitigation measures to reduce the significance of such impacts. The primary question regarding utilities and services, relative to the CEQA process, is whether or not the project has any direct effect on the physical environment through impacts to existing facilities or the requirement to construct new facilities, particularly where such impacts would have an adverse impact on the environment. Information in this section is based on the City of Huntington Beach General Plan, General Plan EIR, and correspondence from public service and utilities agencies (refer to Appendix D, Correspondence).

EXISTING CONDITIONS

Fire Service

The City of Huntington Beach Fire Department operates a total of seven fire stations within the City, including:

- ~ Station 1 (Gothard Station), located at 18311 Gothard Street;
- ~ Station 2 (Murdy Station), located at 16221 Gothard Street;
- ~ Station 3 (Bushard Station), located at 19711 Bushard Street;
- ~ Station 4 (Magnolia Station), located at 21441 Magnolia Avenue;
- ~ Station 5 (Lake Station), located at 530 Lake Street;
- ~ Station 6 (Edwards Station), located at 18590 Edwards Street;
- ~ Station 7 (Warner Station), located at 3831 Warner Avenue; and
- ~ Station 8 (Heil Station), located at 5890 Heil Avenue.

The fire station nearest the project site is Station One, located at 18311 Gothard Street at a distance of approximately one-quarter mile away. The average response time to the project site is under five minutes, 80% of the time. The current ISO rating of the site is ISO Class II.¹

Police Service

The proposed project site is served by the City of Huntington Beach Police Department, which operates through one central police station and four smaller substations. Facilities and their locations are as follows:

- ~ Main Station, located at 2000 Main Street;
- ~ Oakview Center Substation, located at 17261 Oak Lane;
- ~ Downtown Substation, located at 204 Fifth Street;
- ~ Huntington Center Substation, located at 7777 Edinger Avenue; and
- ~ Huntington Harbor Substation, located at 16889 Algonquin Street.

¹ Per phone conversation with Ward Kinsman, Huntington Beach Fire Department, 4/17/01.

The nearest police facility to the project is the Main Station, situated approximately 1.5 miles south of the subject site. This police facility serves the entire City population of 200,000 residents spread over 27 square miles. The average response time to the project site is approximately 5 minutes or less from any part of the City. The Department currently has 234 sworn police officers, 150 civilian employees and 65 black-and-white patrol units.

Schools

The proposed project is within the jurisdiction of the Huntington Beach Union High School District and the Ocean View School District. The Huntington Beach Union High School District currently has a total of nine facilities within the cities of Huntington Beach, Westminster, and Fountain Valley. The high school nearest the subject site is Ocean View High School, located approximately 1.4 miles north of the project site. Ocean View High School had an enrollment of 1,569 students in the Fall of 2000.

A total of 25 schools exist within the jurisdiction of the Ocean View School District, with a total of fifteen in operation. The schools nearest the proposed project site are Hope View School and Mesa View School, with an enrollment of 630 and 721 students, respectively. Hope View School is located approximately 1.5 miles from the subject site, while Mesa View is located approximately 0.5 miles away from the subject site.

Libraries

The Huntington Beach Library System consists of five facilities, including:

- ~ Huntington Central Library and Cultural Center, located at 7111 Talbert Avenue;
- ~ Graham Branch Library, located at 15882 Graham Street;
- ~ Oakview Branch Library, located at 17251 Oak Lane;
- ~ Banning Branch Library, located at 9281 Banning Avenue; and
- ~ Main Street Branch Library, located at 525 Main Street.

The Huntington Beach Central Library and Cultural Center would serve the proposed project and is located approximately 0.25 miles north of the subject site. The Central Library and Cultural Center has an average of 3,000 visitors per day and maintains 350,000 volumes with an additional 12,000 genealogy items and 5,700 media items including compact discs and video cassettes.²

Roadway Maintenance

² City of Huntington Beach General Plan, Public Facilities and Public Services Element, May 13, 1996

The City of Huntington Beach Public Works Department provides roadway maintenance to the City of Huntington Beach. The Department performs regular maintenance on City owned roadways in the form of re-paving, pothole/curb repairs, and striping.

Parks and Recreation

The City of Huntington Beach contains 71 parks with a total area of 577.28 acres. The City's park system includes six mini-parks totaling 2.7 acres, 58 neighborhood parks totaling 157.39 acres, seven community parks totaling 143.28 acres, and two regional parks (Huntington Central Park and Blufftop Park) encompassing 274 acres. It should be noted that a 45-acre sports complex is under construction immediately north and west of the subject site. Other recreational opportunities within the City include two publicly owned golf courses, Huntington Beach City Gym and Pool, Oak View Center, various bikeways, and approximately two miles of equestrian trails. The City's coastal recreational facilities include the Huntington Beach Municipal Pier, various beach parks, recreational vehicle (RV) camping, and Huntington Harbor (a popular boating area).

The recreational facility nearest the project site will be the Huntington Central Park Sports Complex, scheduled for completion in April 2003. This facility will feature an 800-space parking lot, a batting cage, up to four roller hockey rinks, eight lighted softball fields, eight lighted soccer/football fields, two tot-lots, and two restroom/concession structures.³ In addition, extensions of Huntington Central Park exist approximately 0.25 miles to the north, along Talbert Avenue.

Wastewater

The Orange County Sanitation District (OCSD) and the City of Huntington Beach Public Works Department, Engineering Division provide sanitation treatment and sewerage services for the City of Huntington Beach. Presently, 98 percent of the City is connected to the sewer system while the remainder use septic tanks. The two wastewater treatment plants serving the City of Huntington Beach, Plant 1 and Plant 2, perform primary and secondary treatment procedures and are operated by the OCSD. Within the City, the wastewater system is comprised of major trunk lines, smaller feeder lines, and lift stations. The OCSD has developed engineering plans for plant improvements anticipated to meet the needs of the City to the year 2050.⁴

According to City of Huntington Beach GIS data, wastewater lines currently exist within Goldenwest Street, located west of the project site, and Gothard Street, located east of the project site.⁵

Storm Water Drainage

³ Huntington Central Park Master Plan of Recreation Uses, February 26, 1999.

⁴ City of Huntington Beach General Plan, Utilities Element, May 13, 1996.

⁵ Gun Range Project Site Sewer Lines and Water Mains, City of Huntington Beach GIS Department.

The Orange County Flood Control District (OCFCD) and the City of Huntington Beach Public Works Department operate the storm water drainage system within the City of Huntington Beach. The storm drainage system removes water runoff from streets, and, after filtration, transports the runoff to the ocean. The OCFCD owns, operates, maintains, and improves regional flood control facilities. The City of Huntington Beach owns and operates 15 storm drainage channel pumping stations which pump the runoff water into the channels and to the ocean. Presently, the County and City are in the process of improving flood control facilities to accommodate higher levels of storm water.⁶

Water

The Huntington Beach Water Department supplies approximately 33 million gallons per day (MGD) to 49,000 water meters within the City. Typically, 75% of the City's water is supplied by groundwater wells located within the City, while 25% is imported from the Metropolitan Water District (MWD). Facilities within the City of Huntington Beach consist of 480 miles of water lines (ranging from 2" to 42" in diameter), water booster pumps, and three storage tanks with a capacity of nine million gallons, 16 million gallons, and 21 million gallons.

Currently, water distribution mains surround the project site, with facilities located within Goldenwest Street (located west of the project site), Gothard Street (located east of the project site), and Talbert Avenue (located north of the project site). An extension exists from the water main located within Gothard Street to the southeast corner of the subject site.⁷

Reclaimed Water

Currently, reclaimed water use has not been implemented within the City of Huntington Beach. Reclaimed water infrastructure exists in various locations throughout the City, but, as of yet, has not been used for the distribution of reclaimed water. A reclaimed water main exists within Goldenwest Street, located west of the subject site.⁸

Solid Waste

Rainbow Disposal has been contracted by the City of Huntington Beach to provide solid waste collection services under a long-term contract. The City generates 348,219 tons of solid waste per year, resulting from 52,220 tons of commercial waste, 155,625 tons of residential waste, and 140,374 tons of demolition/industrial waste.⁹ The City is responsible for meeting the Assembly Bill 939 (AB 939) mandate of 50% disposal reduction by the start of 2000, and for preparing AB 939 solid waste planning documents.

⁶ City of Huntington Beach General Plan, Utilities Element, May 13, 1996.

⁷ Gun Range Project Site Sewer Lines and Water Mains, City of Huntington Beach GIS Department.

⁸ Per conversation with Mr. Todd Broussard, City of Huntington Beach Public Works Department, 5/2/01.

⁹ City of Huntington Beach General Plan, Utilities Element, May 13, 1996.

Rainbow Disposal currently transports City solid waste to a transfer station located within the City and then to either Frank R. Bowerman Landfill or Brea Olinda Landfill.¹⁰

Electricity

The Southern California Edison Company (SCE) currently provides electrical service to the City of Huntington Beach. Major facilities owned by SCE within the City include six substations, various transmission lines and switchyards (AES currently owns and operates a power plant within the City, located along Pacific Coast Highway west of Magnolia Street). Currently, SCE service meets the City's demands for electricity.¹¹

Gas

The City of Huntington Beach receives natural gas service from the Southern California Gas Company. The Gas Company receives natural gas from Southern California, Northern California, and out of state suppliers. The Gas Company has no immediate plans to update the existing equipment or to implement new technologies aside from the routine maintenance checks and replacements of deteriorating supply lines. The Gas Company is currently meeting present demands and can supply additional natural gas to the City, if required.¹²

The Southern California Gas Company currently has mains located within Goldenwest Street, Ellis Avenue, and Gothard Street, located west, south, and east of the subject site, respectively.¹³

Telephone and Cable Service

Telephone service to the project vicinity is provided by Verizon. Manhole systems exist within Gothard Street (located east of the subject site), 40 feet east of the Huntington Central Library parking lot (located northwest of the subject site), and along Talbert Avenue, located north of the subject site.¹⁴

Cable television service to the City of Huntington Beach is provided by Time Warner Communications. Existing facilities within the project vicinity are located within Talbert Avenue to the north and Gothard Avenue to the East. There are no existing facilities within the proposed project boundaries.¹⁵

IMPACTS

¹⁰ Letter, Ms. Sandra Jacobs, Rainbow Disposal Company, Inc., April 11, 2001.

¹¹ City of Huntington Beach General Plan, Utilities Element, May 13, 1996.

¹² City of Huntington Beach General Plan, Utilities Element, May 13, 1996.

¹³ Letter, Mr. Kevin Stonesifer, Southern California Gas Company, April 23, 2001.

¹⁴ Letter, Ms. Janice Davis, Verizon, April 25, 2001.

¹⁵ Letter, Mr. Bill Jankowski, Time Warner Communications, April 5, 2001.

Significance Criteria

Public Services

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist form used during preparation of the project Initial Study, which is contained in Appendix A of this EIR. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this Section. Accordingly, a significant impact to public services would occur if the project would result in: 1) substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities; and/or 2) the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services. In addition, significant parks/recreation impacts would occur if the project would: 1) increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; and/or 2) include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Fire Service

It is not anticipated that project implementation would result in the need for additional Fire Department facilities. The proposed project is not of the scope or nature to create a significant increase in demand for services related to the City of Huntington Beach Fire Department.¹⁶ In addition, the City of Huntington Beach Fire Department, through mutual aid and automatic aid agreements with Orange County and the cities of Westminster, Santa Ana, Newport Beach, Fountain Valley, and Costa Mesa can provide additional staff as needed. Adequate emergency access will be provided in accordance with City and County requirements, including permanent right-of-entry emergency access through County property, if necessary.

Police Service

The proposed project is not anticipated to create a significant increase in service calls to the project vicinity nor is it expected to create a need for additional police facilities within the City of Huntington Beach. No impacts are anticipated in this regard.¹⁷

Schools

The proposed project includes a potential long-term park/recreation use within an industrial area. The project does not propose housing or other student-generating uses. The project is anticipated to have negligible impacts on school facilities within the City of Huntington Beach. No significant impacts are anticipated.

¹⁶ Per phone conversation with Ward Kinsman, Huntington Beach Fire Department, 4/17/01.

¹⁷ Letter, J.W. Arnold, Captain, City of Huntington Beach Police Department, April 10, 2001.

Libraries

The proposed park/recreation project is not anticipated to create significant additional demand for library services, as it does not involve new housing or otherwise represent significant growth-inducing uses. The present capacity of the City's library system is ample to address any impacts of the proposed project.¹⁸

Roadway Maintenance

The development of the proposed project is not of the scope or nature to have significant impacts on roadway maintenance facilities, provided by the City of Huntington Beach Public Works Department.¹⁹ It should be noted that the Huntington Central Park Sports Complex (scheduled for completion in April 2003) includes roadway improvements to Gothard and Goldenwest Streets.

Recreation

The project is proposed to become an open space/park extension of the existing Huntington Central Park. Implementation of the proposed project would increase the City's open space/park capacity, resulting in positive effects. Therefore, no impacts are anticipated in this regard.

Wastewater

The Orange County Sanitation District and the City of Huntington Beach Public Works Department provide sewerage and treatment services for the City of Huntington Beach. Although the proposed project may incorporate restroom/concession facilities, the project is not of the scope or nature to create a significant increase in demand for wastewater services. Impacts to the wastewater system are not anticipated to occur.²⁰

Storm Water Drainage

The Orange County Flood Control District and the City of Huntington Beach Public Works Department provide storm water drainage services to the City of Huntington Beach. Any interim or long-term recreational uses would incorporate appropriate on-site drainage facilities, ensuring that on-site runoff would be directed to existing storm drains. Therefore, impacts are anticipated to be less than significant with the implementation of appropriate mitigation measures.²¹

Water

¹⁸ Letter, Mr. Ron Hayden, City of Huntington Beach Library Services Department, April 9, 2001.

¹⁹ Per conversation with Mr. Todd Broussard, City of Huntington Beach Public Works Department, 5/2/01.

²⁰ Letter, Mr. Todd Broussard, City of Huntington Beach Public Works Department, April 5, 2001.

²¹ Letter, Mr. Todd Broussard, City of Huntington Beach Public Works Department, April 5, 2001.

The Huntington Beach Water Division and Metropolitan Water District supply and distribute water to the City of Huntington Beach. The implementation of the proposed project may require new facilities to support interim or long-term uses (such as pipeline extensions, drinking fountains and restrooms), although these are not anticipated to be of a nature to create significant impacts. The Green Acres Project (a regional reclaimed water expansion project) is anticipated to supply water for irrigation purposes for various program-level elements of the Huntington Central Park Master Plan. Should water from the Green Acres Project not be available at the time of project implementation, adequate studies will be performed to reduce impacts to water supply systems until water for the Green Acres Project becomes available. In addition, the site is presently designated for open space/recreation uses, and, as such, has been accounted for in the City's long-range water supply planning. The Huntington Beach Water Division does not anticipate significant impacts associated with the proposed project.²²

Reclaimed Water

The City of Huntington Beach currently does not utilize reclaimed water, although reclaimed water facilities exist in many locations throughout the City. Project implementation will not increase demand for reclaimed water, as reclaimed water facilities are not in operation within the City.²³

Solid Waste

The Frank R. Bowerman and Brea Olinda Landfills are the two landfills that are presently used in the disposal of municipal solid waste from the project area. The landfills have sufficient permitted capacity to accommodate the proposed project's solid waste disposal needs. Rainbow Disposal Company will provide solid waste pick-up for the proposed project site as long as access is granted.²⁴ In addition, the applicant will prepare a waste reduction plan for the construction and demolition (C&D) waste generated from this project.

Hazardous materials (California Hazardous Waste and Resource Conservation Recovery Act [RCRA] Hazardous Waste) associated with site remediation to be disposed of off-site will be transported to a permitted landfill facility. Landfill disposal sites are typically classified within the following three designation categories:²⁵

- ~ **Class I:** Class I sites are at the upper tier of upland landfills. Typically these sites have limited capacities and are the most costly to use. Class I sites are facilities that can accept hazardous wastes as well as municipal solid waste, construction debris, and yard waste.
- ~ **Class II:** The next level of upland landfill sites are Class II sites. Class II sites may receive certain designated waste along with municipal solid waste, construction debris, and yard waste.

²² Letter, Mr. Todd Broussard, City of Huntington Beach Public Works Department, April 5, 2001.

²³ Per conversation with Mr. Todd Broussard, City of Huntington Beach Public Works Department, 5/2/01.

²⁴ Letter, Ms. Sandra Jacobs, Rainbow Disposal Company, Inc., April 11, 2001.

²⁵ <http://www.spl.usace.army.mil/pd/coastal/upland.html>

- ~ **Class III:** Class III sites are the most restrictive of the three landfill classifications, with regard to the types of material that can be accepted. In general, Class III sites can only accept non-hazardous waste. These types of waste include solid waste, construction debris, wood and yard waste, and certain industrial waste that meet individual facility permit criteria.

All hazardous materials from the project site would be hauled to a permitted Class II or Class III landfill facility in accordance with all local, state, and federal safety regulations. With the preparation of a waste reduction plan, impacts with regards to solid waste are anticipated to be less than significant.

Electricity

SCE provides electrical service to the City of Huntington Beach. The proposed project is anticipated to require a nominal amount of electricity, primarily for lighting. Prior to construction of the project, adequate analysis will be performed to determine the need for additional electrical facilities. SCE is prepared to install electrical distribution facilities to the subject site.²⁶ No impacts are anticipated in this regard.

Gas

The Southern California Gas Company provides natural gas service to the project vicinity and has facilities surrounding the project site. The capacity of existing facilities is adequate to serve the project. Project implementation would not result in any construction related impacts to the service area. No impacts are anticipated in this regard.

Telephone and Cable

Verizon has facilities in the area to serve the proposed project, and telephone service will be available to the subject site. Currently, facilities exist to the east along Gothard Street, to the north along Talbert Avenue, and to the northwest near Huntington Central Library. An extension from these facilities to the project site may be necessary to serve the project site, although this is not anticipated to represent a significant impact, considering that the lines will likely be placed within public right-of-way or existing easements. Impacts in this regard are anticipated to be less than significant.

Cable television access to the City of Huntington Beach is provided by Time Warner Communications. Although it is not expected that cable television access will be necessary for project implementation, cable television can be provided if an extension is constructed from current facilities located within Gothard Street and Talbert Avenue. Impacts are anticipated to be less than significant.

MITIGATION MEASURES

Fire Service

²⁶ Letter, Ms. Spring Bowles, Southern California Edison, April 16, 2001.

PSU-1 If necessary, the City of Huntington Beach will coordinate with the County of Orange to provide permanent right-of-entry emergency access through County property for the proposed project.

Police Service

None required.

Schools

None required.

Libraries

None required.

Roadway Maintenance

None required.

Recreation

None required.

Wastewater

None required.

Drainage

PSU-2 Prior to the issuance of grading or building permits, the City of Huntington Beach will require that the project is designed such that there are no substantial increases in the rate and amount of surface runoff. Incidental drainage will be routed off of the site to existing storm drains.

Water

PSU-3 If the Green Acres Project is not yet operational and able to supply water to the proposed project prior to the development of final plans and specifications, additional studies will be undertaken to determine the extent to which one or a combination of the following measures will be necessary to reduce impacts to water supply systems for program level elements during the interim until water from the Green Acres Project is available:

- ~ Reduce the required irrigable areas by 10 percent;
- ~ Enhance the utilization of existing groundwater systems (i.e., subpotable wells); or
- ~ Supplement the irrigation supply with water from the domestic water system.

Solid Waste

- PSU-4 Prior to initiating site demolition or remediation activities, the City will prepare a waste reduction plan for the generation of construction and demolition waste from the proposed project. This plan should involve the recycling coordinator from the City of Huntington Beach to help ensure that AB 939 requirements are properly addressed.

Electricity

- PSU-5 Prior to the construction of program level elements, additional electrical load analyses shall be undertaken to determine the need for additional electrical transformers.

Gas

None required.

Telephone and Cable Service

None required.

UNAVOIDABLE SIGNIFICANT IMPACTS

None have been identified.

4.7 AESTHETICS/LIGHT & GLARE

Visual resources information in this section was compiled from site photographs and site surveys conducted by RBF Consulting in March 2001. Project impacts on the aesthetic character of the site from grading activities and building construction are analyzed and evaluated in relation to existing and surrounding site conditions. Consideration of public scenic views, introduction of new sources of light and glare, and compatibility of the proposed project with adjacent local aesthetic resources are included in this section.

EXISTING CONDITIONS

AESTHETICS

On-Site

The existing site aesthetic quality can be characterized as low to non-existent, considering that the site is an abandoned gun range facility consisting of deteriorating structures, dirt, rubbish and sporadic non-native and weedy plant species. The site is fully-developed, with no unique vegetation or other visual resources. The site is comprised of a small, elevated rangemaster's office, a small restroom facility, two office trailers, a covered row of firing stations, and a large storage shed (all abandoned, and in deteriorating condition). Wooden posts form barriers approximately 20 feet high and surround/partition the site into numerous sections. The subject site has been overgrown by considerable amounts of non-native shrubs, bushes, and small trees (refer to Exhibit 3, *AERIAL PHOTO* and Exhibit 8, *ON-SITE PHOTOS*).

Off-Site

Views of the site are available from Ocean View Mobile Home Park located to the southwest, Goldenwest Street to the west and Huntington Central Library to the north. Adjacent land uses include open space to the north and west, Sully Miller Lake to the south, the Orange County Transfer Station to the east, and the Hanson Aggregates West Inc. Huntington Beach Recycling Center to the northeast. It should be noted that the Hanson Recycling Center contains several mounds of asphalt and concrete debris, with heights of up to approximately 20-25 feet (refer to Exhibit 9, *OFF-SITE PHOTOS*). Considering the disturbed nature of the site and its proximity to the Hanson Recycling Center and Orange County Transfer Station, the visual quality of this portion of Huntington Central Park is considered low. The project site does lie adjacent to the Huntington Central Park Sports Complex, which is planned for completion in April 2003. Portions of the Sports Complex would have direct views into the project site.

LIGHT/GLARE

On-Site

The existing project site does not produce any significant light or glare due to the lack of operational on-site lighting facilities.

Off-Site

The predominant sources of light and glare within the site vicinity are from street lighting along surrounding roads and parking lot lighting at Huntington Central Library located north of the project site. Adjacent buildings and motor vehicles in parking areas and along City streets generate relatively minor amounts of glare. Existing light sources include security and street lighting from adjacent uses, as well as vehicles traveling on Goldenwest Street, Talbert Avenue, Gothard Street, and Ellis Avenue.

IMPACTS

Significance thresholds in this Section are based on the CEQA Appendix G Environmental Checklist Form as indicated below.

Significance Criteria

A potentially significant impact to aesthetics would occur if the project caused one or more of the following to occur:

- ~ the project were to affect a scenic vista or scenic highway;
- ~ the project were to have a demonstrable negative aesthetic effect; and/or
- ~ the project were to create adverse light or glare effects.

The significance of an aesthetic impact, in terms of this project, can be determined by examining anticipated project effects from a number of different vantage points, including construction-related visual disruption, observer position, and changes to the existing visual character of the area.

CONSTRUCTION RELATED IMPACTS

Remediation/construction debris, associated equipment and heavy truck traffic may adversely impact views of and across the project site. Remediation and construction activities on the site would be visible from adjacent uses including Ocean View Mobile Home Park, Huntington Central Library and the adjacent Sports Complex (under construction). Remediation/construction would also be visible from Talbert Avenue and Goldenwest Street. However, these impacts would not be considered significant, as they would be short-term, and considering the relatively small scale of the project. Standard construction measures such as screened construction fencing would be utilized to screen the staging and construction areas from site visitors and the general public.

SITE CHARACTER

The project site exists as a former gun range utilized by the general public and Huntington Beach Police Officers Association. The site is located within an industrial area, with Hanson Recycling Center located adjacent to the northeast and the Orange County Transfer Station adjacent to the

Exhibit 8 ON-SITE PHOTOS

Exhibit 9 OFF-SITE PHOTOS

east. Currently, no aesthetic screening exists around the proposed project site. The proposed project would improve the aesthetic character of the site vicinity by replacing the existing dilapidated gun range facility and associated deteriorated structures and debris with open space/park uses. The project would adhere to all City requirements with regard to building heights, landscaping, lighting, setbacks and lot coverage. Therefore, the project is considered to represent a positive impact relative to change in the existing on-site character.

Relative to the project's interim and long-term recreational/open space use aesthetic effects on adjacent uses, the potential future uses are anticipated to represent a less than significant aesthetic impact. This is based on the primary assumption that the future use(s) would be consistent with existing site land use and zoning designations for recreational/open space uses. This EIR has assumed that future uses would be of a "Low" to "Medium" intensity, as defined in the Huntington Central Park Master Plan. In addition, any structures associated with the project would require Design Review Board approval, as is required of structures within public-designated areas. With respect to aesthetics, given that the adjacent uses are recreational and industrial, a more intense recreational use would not be expected to have any greater aesthetic impacts.

LIGHT AND GLARE

Currently, the project site is void of lighting facilities and lacks reflective surfaces capable of producing significant amounts of glare. Additional light fixtures may be necessary for proposed interim or long-term facilities. Any new lighting would be subject to City design standards and would utilize directional lighting techniques and low wattage bulbs (without compromising site safety or security) in order to direct light downwards and minimize light spillover. Project implementation may also result in additional reflective surfaces on proposed structures, and from vehicles utilizing the facility. However, the resulting glare effects would be relatively minor when compared to existing levels of glare in the project area. This impact is considered less than significant with implementation of standard design practices and required mitigation.

MITIGATION MEASURES

CONSTRUCTION RELATED IMPACTS

None required.

SITE CHARACTER

AES-1 For areas visible by existing or proposed residential areas, exterior mechanical equipment shall be screened from view on all sides, and rooftop mechanical equipment shall be setback 15 feet from the exterior edges of the building. Equipment to be screened includes, but is not limited to, heating, air conditioning, refrigeration equipment, plumbing lines, ductwork and transformers. Said screening shall be architecturally compatible with the building in terms of materials and colors. If screening is not designed specifically into the building, a rooftop mechanical equipment

plan showing screening must be submitted for review and approval with the application for building permit(s).

LIGHT AND GLARE

AES-2 If outdoor lighting is included, light intensity shall be limited to that necessary for adequate security and safety. All outside lighting shall be directed to prevent “spillage” onto adjacent properties and shall be shown on the site plan and elevations.

UNAVOIDABLE SIGNIFICANT IMPACTS

None have been identified.

5.0 LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT

5.1 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES THAT WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

In accordance with CEQA Guidelines §15126.2(c), an EIR must identify potentially irreversible environmental changes associated with a project, including use of non-renewable natural resources during construction and operation, increased accessibility to natural resources, increased long-term commitments to using natural resources, and/or potential for project-related accidents that could irreversibly affect the environment. This EIR has identified the following potentially irreversible environmental changes associated with project implementation:

- ~ The project will not require unusually large quantities of natural resources for remediation construction, due to the relatively limited area of remediation and the site's proposed open space/park use;
- ~ Operation and maintenance of the proposed extension of Huntington Central Park will result in increased water use for the irrigation of landscaping. However, adequate water supply and facilities are available to serve the proposed project site; or
- ~ The proposed remediation plan will have long-term positive public health and safety effects due to reduced potential for risk of upset. However, although actual site contamination levels will be reduced to acceptable levels, the proposed long-term recreational open space uses will attract additional people to the site.

5.2 GROWTH-INDUCING IMPACTS OF THE PROPOSED ACTION

Pursuant to CEQA Section 15126.2(d), the following section discusses ways in which the proposed project could foster economic, housing, or population growth, whether directly or indirectly in the surrounding environments. The growth-inducing impacts of the proposed project are assessed in terms of whether the project removes obstacles to development, requires construction of expanded facilities that could serve other future developments, or otherwise facilitate or encourage development of other activities that could significantly affect that environment. "It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

Population

The population of the County of Orange was 2,880,200 as of January 1, 2001 and 2,939,500 as of January 1, 2002. This represented a 2.1 percent increase in population over this time period. The population of the City of Huntington Beach was 191,500 as of January 1, 2001 and 194,600

as of January 1, 2002.¹ This represented a 1.6 percent increase in population over this time period. Therefore, the population of the City of Huntington Beach increased at a slightly slower rate than that of the County over the past year. In 2002, the population of the City of Huntington Beach represented 6.6 percent of the total population of the County of Orange. The California Department of Finance estimates an increase in County population to 3,031,440 in the year 2005, and to 3,168,942 in the year 2010.²

The proposed project would not directly generate an increase in population since no new housing would be constructed as part of the project. There are no substantial infrastructure improvements required for the project. Although the project may require relatively nominal additional staff for long-term recreational uses, the project is not of the scope or nature such that it is anticipated to generate the need for new housing in the area. The proposed project is consistent with all City planning policies. Therefore, project implementation does not have the capacity to result in an increase in population beyond local or regional population projections.

Housing

The California Department of Finance estimated approximately 986,606 housing units with a vacancy rate of 3.53 percent in the County of Orange, and 76,410 housing units with a vacancy rate of 2.65 percent in the City of Huntington Beach as of January 1, 2002.³ The open space/park project would occur at the former gun range facility location and would not involve the construction of any new housing or the relocation of any existing housing. Although the project may result in a minimal increase in employees which would work on-site, it would not affect the availability of housing or create additional demand for housing throughout the community.

Employment

The proposed project site exists as a former gun range which ceased operating in 1997. The existing facility is abandoned and does not require the employment of any personnel. Implementation of the proposed extension of Huntington Central Park would generate minor short-term and long-term employment within the City of Huntington Beach. Facility enhancements are not expected to result in a substantial need for operational staff at the proposed open space/park facility, although temporary employment would be provided for gun range remediation and construction (see Section 3, *PROJECT DESCRIPTION*). Project implementation would not appreciably affect the projected employment figure of 1,589,100 jobs in the year 2006 for the County of Orange⁴. In addition, due to the small scale of the proposed project, the project would not substantially affect the jobs/housing balance of the City of Huntington Beach. It should further

be noted that the project is considered consistent with the City of Huntington Beach General Plan

¹ California Department of Finance, "City/County Population Estimates, with Annual Percent Change, January 1, 2001 and 2002." May 2002.

² Center for Demographic Research, "Orange County Facts and Figures", March 2002.

³ California Department of Finance, Report E-5, "City/County Population and Housing Estimates, 2002, Revised 2001, with 2000 Census Counts." May 2002.

⁴ California Employment Development Department. "Orange County Occupational Projections, 1999-2006." July, 1999.

and Zoning Ordinance.

As the proposed project does not include the construction of housing, and since proposed on-site enhancements are not expected to result in a substantial increase in employment, the project would result in only nominal increases in population and short-term/long-term employment, and no increase in housing within the City of Huntington Beach. In addition, the project would not substantially induce growth in the area directly or indirectly, since the project area is essentially “built-out” and since the project would utilize existing infrastructure facilities, and will be in compliance with the City’s General Plan and Zoning.

5.3 CUMULATIVE IMPACTS

This section has been included in the EIR to address the cumulative impacts associated with the proposed project. In accordance with CEQA Guidelines §15130, an EIR shall address cumulative impacts of a project when the project’s incremental cumulative effect is considerable, as defined in §15065(c). The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as much detail as is provided for the effects attributable to the project alone. The EIR need not address cumulative impacts for which the project does not contribute. The discussion should be guided by the standards of practicality and reasonableness. The following elements are necessary for an adequate discussion of cumulative impacts.

1. **Either:**
 - a. A list of relevant past, present and probable future projects producing related or cumulative impacts including, if necessary, those projects outside the control of the agency, or
 - b. A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.
2. A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available, and
3. A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project’s contribution to any significant cumulative effects.

Geographic Scope of Cumulative Impact Assessment

Due to the relatively small scale of the project, this EIR focuses primarily on the subject site vicinity and adjacent environs, with some assessment of cumulative impacts on a city-wide basis.

Cumulative Impact Methodology

The following cumulative impact discussion is based primarily on build-out of the City's General Plan, Zoning and Subdivision Ordinance, General Plan EIR, and Central Park Master EIR. These documents are contained in Section 2.5, *DOCUMENTATION INCORPORATED BY REFERENCE*. The cumulative projects identified below represent the currently known probable projects at the time of Draft EIR publication.

Cumulative impacts may be discussed in terms of project impacts, in combination with impacts anticipated for future development (including approved and planned development within the project area and surrounding affected area). The geographic area for each impact varies, depending on the nature of the impact, whether it is regional, such as air quality, or local such as noise.

Quantification is difficult for cumulative impacts, as it would require speculative estimates of impacts including, but not limited to, the following: the geographic diversity of impacts (impacts of future development may affect different areas); variations in time of impacts (many project impacts would occur at different times, and would be reduced or removed before other impacts occurred); complete data are not available for all future development; and data for future development may change following subsequent approvals. However, every attempt has been made here to make a qualitative judgement of the combined effect of, and relationship between, cumulative projects. CEQA notes that the discussion of cumulative impacts should be guided by standards of practicality and reasonableness (guidelines, §15130 (b)). Only those impacts that might compound or interrelate with those of the project at hand require evaluation. Potential cumulative impacts of the proposed project, in combination with cumulative development projects, are discussed below. Precise impacts of future development have been or will be discussed in appropriate environmental documentation (depending on what state of approval the project is in).

Cumulative Projects

In addition to incorporating by reference the cumulative impact discussion from the City of Huntington Beach General Plan EIR and Central Park Master EIR, this EIR has provided the following list of specific cumulative projects to ensure an adequate assessment:

The following proposed projects are located within one mile of the subject site:

- ~ Central Park Sports Complex (45-acre facility with lighted softball/soccer fields, concession/restroom structures, maintenance facilities, and parking, located near Gothard Street and Talbert Avenue).
- ~ Central Park Equestrian Center (20 pipe corrals, three office trailers, 6,500 square feet of manure bunkers, three farrier work stations, three wash racks, six cross ties, a decomposed granite and sand storage area, and a 4,000 s.f. maintenance yard, located near Taylor Drive and Goldenwest Street).
- ~ The Tides (77 townhouse units located near Goldenwest Street and Clay Avenue).
- ~ In-N-Out Burger (3,100 s.f. restaurant located at Talbert Avenue and Beach Boulevard).
- ~ Woodwind Commerce Industrial Business Park (97,000 s.f. industrial business park located on the north side of Talbert Avenue, between Gothard Street and Beach Boulevard).

- ~ Southridge Homes (13 single family dwellings located at Main Street and Clay Avenue).
- ~ The Fountains Senior Apartments (271 residential units located near Main Street and Yorktown Avenue).
- ~ Nine-unit residential project (located at Garfield Avenue and Huntington Street).
- ~ Geil Kiln (21,000 s.f. manufacturing facility located near Gothard Street and Clay Avenue).
- ~ PLC, four-unit, seven-unit, and 10-unit condominium dwelling subdivisions (located near Gothard Street and Main Street).
- ~ PLC, 29 unit apartment complex (located at Main Street and Gothard Street).
- ~ Seacliff Business Center (62,000 s.f. industrial business park located near Goldenwest Street and Clay Avenue).

The following projects are located more than one mile from the subject site:

- ~ 253 single family and townhouse dwellings (located at Palm Avenue and Goldenwest Street).⁵
- ~ Lowe's Hardware (100,000 s.f. building/garden center located at Beach Boulevard and Warner Avenue).⁶
- ~ 86 detached single family dwellings (located at Beach Boulevard and Atlanta Avenue).
- ~ Delaware Apartments (30 apartment units located at Delaware Street and Utica Avenue).
- ~ Meadowlark Specific Plan (313 detached single family dwellings located near Heil Avenue and Bolsa Chica Street).⁷
- ~ Huntington Beach Mall (1 million s.f. of regional commercial development [rebuild], located north of Edinger Avenue between Gothard Street and Beach Boulevard).⁸
- ~ Waterfront Residential (184 attached residential dwellings located near Beach Boulevard and Pacific Coast Highway).

The majority of cumulative projects have been accounted for and previously analyzed within the City of Huntington Beach General Plan, General Plan EIR, and Zoning and Subdivision Ordinance.

⁵ The portion of the site owned by PLC was rezoned to the Palm and Goldenwest Specific Plan. Prior to rezoning, the site had a maximum potential for 840 dwelling units. With rezoning and approval of other entitlements, the site will have an ultimate build-out of 253 units.

⁶ The site is proposed to be rezoned from PS (Public-Semipublic) to CG (Commercial General). This site is currently a vacant school.

⁷ The Meadowlark Specific Plan was revised to allow a maximum of 345 units instead of 600 units. The project was built with only 313 units.

⁸ This project underwent a zone change, however, the intensity of development did not change. The property was rezoned from CG (Commercial General) to a specific plan. However, commercial development is allowed under either zoning.

Four cumulative projects require a zoning change or General Plan amendment. However, all four projects are located over one mile from the subject site. Any environmental impacts resulting from a zoning change or General Plan amendment will be mitigated properly on a case-by-case basis. Impacts in this regard are not anticipated to be significant.

Public Health and Safety

The proposed project has positive public health and safety effects due to remediation of the former gun range facility. On a cumulative basis, other project sites that are constrained due to site contamination will require remediation on a case-by-case basis, in accordance with applicable health and safety regulations.

Land Use/Relevant Planning

The proposed project is not considered to represent a significant cumulative land use or relevant planning impact, as the remediation/construction processes are consistent with the City of Huntington Beach General Plan and Central Park Master EIR. Mitigation of cumulative land use impacts are best accomplished by area-wide mitigation programs, conforming to the adopted zoning, General Plan designations and zoning, and implementing project-specific mitigation measures where appropriate.

Geology and Soils

Cumulative effects related to earth resources resulting from the proposed project and development in the vicinity of the proposed project include short term increases in erosion due to excavation, backfilling and grading activities. These impacts are anticipated to be mitigated by enforcing proper erosion protection measures during remediation and construction of the proposed project, and will be mitigated on a project-by-project basis. In addition, sites with unsuitable development conditions such as liquefaction and seismic hazards, are best mitigated on an individual basis. The proposed project will comply with the Uniform Building Code (UBC) and all erosion control measures established by the City. The proposed project is not anticipated to negatively add to the cumulative impacts of the area with regards to geology and soils.

Air Quality

The proposed project would, in combination with other developments in the area, have cumulative air quality impacts due to direct impacts from vehicle emissions and indirect impacts from electricity consumption. Cumulative air quality impacts are best mitigated by compliance with the City's General plan to ensure jobs/housing balance consistency, and through compliance with applicable emissions reduction measures as required by the South Coast Air Quality Management District.

Noise

Potential long-term noise associated with the proposed project is expected to be generated by both mobile and stationary sources. Increased traffic volumes resulting from the implementation of the proposed project and cumulative development of surrounding areas are anticipated to result in cumulative increases in noise levels within the City. The project's contribution to this increase, however, is considered negligible (see Section 4.5, *NOISE*), and has been previously analyzed

within the City's General Plan, General Plan EIR, Central Park Master EIR, and the City's Transportation System Needs Analysis, 2000-2010. Construction-related noise may also contribute to cumulative noise impacts. However, the geographic separation and differing schedules of these projects, together with compliance with the City's standard construction requirements, should minimize impacts to any one area. Due to the scope and nature of the open space/park project, on-site stationary noise sources are not expected to generate significant amounts of noise and will be consistent with City standards and analysis contained in the Central Park Master EIR.

Aesthetics/Light and Glare

Temporary construction impacts and facility operation will change the aesthetic character of the project site vicinity. The project site exists as a dilapidated gun range which ceased operating in 1997. The proposed project is expected to improve the overall aesthetic character of the site vicinity by replacing the former gun range with an open space/park facility. The proposed extension of Huntington Central Park may introduce new sources of lighting to the area. However, appropriate mitigation measures to prevent the occurrence of significant amounts of light spillover will be incorporated into site design. Therefore, the proposed project is not anticipated to be cumulatively significant with other projects within the City in this regard.

Public Services and Utilities

The proposed project is not expected to result in any individual or cumulative impacts to public services and utilities. Cumulative impacts are best addressed on a project-specific basis and through implementation of City-wide programs such as service connection and impact fees, energy conserved and recycling programs.

6.0 ALTERNATIVES TO THE PROPOSED ACTION

In conformance with CEQA Guidelines §15126.6, the EIR has included a comparative impact assessment of “alternatives to the proposed project”. The primary purpose for this section is to provide decision-makers and the public with a “reasonable range” of project alternatives which could feasibly attain most of the basic project objectives, while avoiding or substantially lessening any of the project’s significant adverse environmental effects. Important considerations for this alternatives analysis include (as noted in §15126.6):

- ~ “...An EIR need not consider every conceivable alternative to a project.”
- ~ An EIR should identify “alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process...”
- ~ Reasons for rejecting an alternative include:
 - “...failure to meet most of the basic project objectives”;
 - “...infeasibility”; and
 - “...inability to avoid significant environmental effects”.

The EIR has identified an “unavoidable” significant impact of the project in regards to short-term remediation/construction-related NO_x emissions. It is not anticipated that implementation of any of the feasible alternatives to the proposed project would eliminate this unavoidable significant impact. However, certain cumulative impacts, to which the project will contribute, may be slightly reduced with some of the alternatives. Project-related cumulative impacts include air quality and noise, although the project’s contribution is not “cumulatively considerable” as defined in CEQA Guidelines §15126.6. As noted in Section 3.4, *PROJECT OBJECTIVES*, the proposed project’s “basic objectives” consist of:

1. Remediate the former gun range facility of on-site contaminants resulting from over 20 years of firing range use, in order to protect the health and safety of those in the surrounding community.
2. Provide residents within the City of Huntington Beach with open space/recreational opportunities through the provision of interim/long-term park facilities upon completion of site remediation.

6.1 "NO DEVELOPMENT" ALTERNATIVE

None of the impacts associated with the proposed development and construction activities would occur if the "No Development" alternative were selected. Implementation of this alternative would leave the existing abandoned gun range facility in place, and would avoid any adverse physical or environmental impacts associated with the proposed project. Existing geologic, soils, and aesthetic conditions in the area would remain the same. Air quality and noise impacts due to building and park construction and increased traffic would not occur with the "No Development" alternative.

Under the "No Development" alternative, the project site would not be developed to its planned condition, as set forth in the City of Huntington Beach General Plan. Although ostensibly feasible, the "No Development" alternative is not presently being considered because it fails to meet the basic project objectives and is not consistent with current City plans for the site (given the site's dilapidated condition). In addition, the existing gun range facility, if not remediated as proposed, degrades the aesthetic character of the vicinity and poses a significant health risk due to significant amounts of on-site contamination.

6.2 "INTERIM USE" ALTERNATIVE

The "interim use" alternative would involve a temporary use on-site after the site has been remediated until a long-term open space/park facility is established. Possible interim uses would be consistent with City designations for the site, which include an "Open Space-Park (OS-P)" designation by the General Plan and "Open Space-Parks and Recreation (OS-PR)" by the Zoning and Subdivision Ordinance. In addition, the Central Park Master EIR sets forth five land use designations to be used within Huntington Central Park, which includes the subject site itself:

- ~ L - Recreation/Low Intensity: Open Space developed for low intensity passive-type researched activities
- ~ M - Recreation/Medium Intensity: Open Space developed for medium intensity or semi-active recreation activities
- ~ H - Recreation/High Intensity: Developed area for high intensity or active type recreation activities. This designation includes structural and/or support facilities
- ~ E - Environmental Sensitive Areas: Limited development, for public use, that does not adversely impact identified scientific, ecological, cultural, or aesthetic features
- ~ O - Operations: Land set aside for maintenance/operational facilities.¹

Possible uses, among others, include:

- ~ Maintenance/Operations Facility
- ~ Camping Area
- ~ Children's Playground
- ~ Picnic Area
- ~ Snack Bar/Restaurant
- ~ Dog Park
- ~ Parking facility

¹ Huntington Central Park Master Plan of Recreation Uses, February 6, 1999.

Other interim uses are possible, which may require a Conditional use Permit, Zone Change and/or General Plan Amendment. As discussed in Section 3, *PROJECT DESCRIPTION*, due to the conceptual nature of potential interim or long-term uses, any such use(s) would require separate discretionary review and environmental documentation by the City of Huntington Beach. For the purposes of this discussion, the interim use is assumed to be consistent with City General Plan and Zoning designations, and generally be characterized as a moderate to low intensity recreational use (such as picnic area, dog park, or similar use). Based on the large number of possible interim uses for the subject site, it is difficult to present a well-defined "Interim Use" alternative. Potential impacts resulting from the various project implementation scenarios vary greatly from one another. The following description is a broad characterization of potential impacts based on the possible "interim use" alternatives described above:

Public Health and Safety

An interim use would be expected to have similar impacts as the long-term recreational use. All remedial objectives found in the Remedial Action Plan would apply to either a long-term or interim use.

Land Use/Relevant Planning

As described in detail above, this alternative would be consistent with land use designations in the City's General Plan, zoning ordinance, and policies contained within the Central Park Master EIR. The Ocean View Mobile Home Park and Huntington Central Library are the two sensitive receptors in the immediate project vicinity. Higher intensity recreational uses may create potential land use conflicts within the site vicinity and would be greater than the proposed project, which assumes to be a medium/low-intensity use.

Geology and Soils

Structures associated with higher intensity uses would have greater geological impacts than the proposed project, particularly with respect to settlement and special foundation requirements. The project site is situated on a decomposing landfill which ceased operating in the 1960's. Considerable improvements may be necessary to create a stable building pad for uses such as a maintenance facility or other large structure.

Air Quality

Air quality impacts associated with the majority of allowed interim uses would not be significant. Higher intensity recreational uses attracting high volumes of users (entertainment areas, a maintenance facility, parking facility) may introduce higher volumes of vehicle emissions into the immediate vicinity. Impacts associated with higher intensity recreational uses would be greater than those of the proposed project.

Noise

Noise impacts associated with the majority of allowed interim uses would not be significant. Higher intensity recreational uses attracting high volumes of users (entertainment areas, a maintenance facility, parking facility) may introduce higher noise levels in the project vicinity due to facility operations and increased vehicle trips. Impacts associated with higher intensity recreational uses would be greater than those of the proposed project.

Public Services and Utilities

Impacts with regards to public services and utilities for interim uses are not anticipated to be significant, as future recreational development has been adequately analyzed within the City's General Plan EIR and the Central Park Master EIR with regards to public services and utilities.

Aesthetics/Light & Glare

Higher intensity recreational uses associated with the "interim use" alternative will have greater impacts with regards to aesthetics, light, and glare than the proposed project, which is assumed to be of moderate/lower intensity. Visually prominent structures, reflective surfaces, and associated lighting have the potential to impact the Ocean View Mobile Home Park and Huntington Central Library.

Summary

Depending on the nature of the Interim Use, this alternative would generally be expected to have similar impacts as the project. Certain more intense recreational activities or those involving substantial structures may have greater impacts in all issue areas, particularly geotechnical constraints. In addition, a higher intensity interim use may create parking and traffic impacts, which are not expected to occur with the proposed project. Although the City may pursue an interim use in the future, this is not under consideration at this time and would require separate discretionary review and environmental evaluation.

6.3 "RELOCATION OF HANSON RECYCLING CENTER" ALTERNATIVE

This alternative involves the relocation of Hanson Aggregates West, Inc. Huntington Beach Recycling Center (located immediately northeast of the subject site) onto a portion of the former gun range, after remediation is complete. The Hanson Recycling Center is a 2.8-acre facility that recycles broken concrete and asphalt solid waste and processes it into road base material. The facility receives an average of 30 trucks per day. A portable rock crusher is brought on-site twice a year, for three to four weeks each use. The existing Hanson facility is currently located within the boundaries of Huntington Central Park.

Because the subject site is designated "Open Space-Park (OS-P)" by the City's General Plan and "Open Space-Parks and Recreation (OS-PR)" by the Zoning and Subdivision Ordinance, the Hanson Recycling Center Relocation would be an "interim" use until long-term open space/park facilities are implemented on-site as designated by the City of Huntington Beach General Plan. In

addition, this alternative would require either a revised or new Conditional Use Permit and undergo a separate discretionary review process.

Public Health and Safety

Due to the greater structural load placed on the underlying landfill, for both the aggregate rock pile and the rock crusher, this alternative may accelerate local differential settlement and/or landfill gas migration. Special design measures may be necessary to accommodate this use.

Land Use Planning

The "Relocation of Hanson Recycling Center" alternative is anticipated to result in similar land use impacts when compared to the proposed project. The relocation of the Hanson facility approximately 200 feet southwest of its previous long-term location (of approximately 20 years) would result in a negligible increase in noise, air, and aesthetic impacts when considering that the Sports Complex separates the project site and the Ocean View Mobile Home Park and the requirements that the Hanson facility would be aesthetically screened and maximum heights of aggregate stockpiles on-site would be lower than currently allowed.

Geology and Soils

As noted above, this alternative may require special design measures due to increased structural load over the former landfill.

Air Quality

The "Relocation of Hanson Recycling Center" alternative is anticipated to result in similar air quality impacts in comparison to the proposed project. The recycling facility would not generate higher levels of traffic, would utilize the same access road as the existing Hanson facility, and truck traffic generated by the facility would use the same routes as the existing facility. The relocation of the Hanson facility approximately 200 feet southwest of its previous long-term location (of approximately 20 years) would result in a negligible increase in air impacts when considering that the Sports Complex separates the project site and the Ocean View Mobile Home Park and the fact that prevailing winds in the site vicinity carry dust to the north.

Noise

This alternative, as stated above, is anticipated to result in similar noise impacts in comparison to the proposed project. The relocation of the Hanson facility approximately 200 feet southwest of its previous long-term location (of approximately 20 years) would result in a negligible increase in noise impacts when considering existing ambient noise levels in the vicinity, that the Sports Complex separates the project site and the Ocean View Mobile Home Park, and the fact that prevailing winds in the site vicinity dissipate noise to the north.

Public Services and Utilities

The alternative will not create significant impacts to utilities, as the Hanson facility will require minimal amounts of electricity and water, of which adequate facilities currently exist. Demand for public services will not exceed that of the existing facility in its present location.

Aesthetics/Light & Glare

The "Relocation of Hanson Recycling Center" alternative is anticipated to have similar impacts in comparison to the proposed project in regards to aesthetics, light, and glare. As stated above, the relocation of the Hanson facility approximately 200 feet southwest of its previous long-term location (of approximately 20 years) would result in a negligible increase in aesthetic impacts when considering that the Sports Complex separates the project site and the Ocean View Mobile Home Park and the requirements that the Hanson facility would be aesthetically screened and maximum heights of aggregate stockpiles on-site would be lower than currently allowed.

Summary

This alternative, although originally under consideration by the City, is not presently being considered due to the City's desire to utilize the site for recreational uses. Should this alternative be considered in the future, it would require separate discretionary review and environmental analysis. As described above, this alternative, although relocating an existing activity without substantially changing operations, may pose greater impacts in terms of landfill gas and settlement hazards while impacts in regards to aesthetics, air quality, and noise would be similar to those of the proposed project.

6.4 "ALTERNATIVE USE" ALTERNATIVE

The City is not exploring more intense "Alternative Uses" such as commercial, industrial or residential, primarily due to the site's previous use as a landfill operated by the County of Orange until the 1960's and the City's desire to maintain the site as open space in the long term.

6.5 "ALTERNATIVE SITE" ALTERNATIVE

"Alternative Site" for this project would not be applicable. As stated in Section 3.4, PROJECT OBJECTIVES, the remediation of the former gun range facility is a basic objective of the proposed project. On-site contamination, consisting primarily of lead, zinc, and copper, poses a serious health threat to the surrounding community. The selection of an alternative site would conflict with the primary purpose of the project, and therefore is not under consideration.

6.6 ALTERNATIVE PROJECT DESIGNS

There are two alternatives for site remediation, although the feasible solutions are relatively limited due to the site's size and nature of contamination (discussed in Section 4.1, *PUBLIC HEALTH AND SAFETY*). Any alternative design for remedial operations would most likely result in similar impacts to the proposed project. In regards to reuse of the subject site, the City has yet to select a specific long-term recreational use, and, as such, any alternative project design for reuse would

be subject to separate discretionary and environmental review.

6.7 “ENVIRONMENTALLY SUPERIOR” ALTERNATIVE

None of the above alternatives are considered “environmentally superior” to the proposed project. The “No Project” alternative would minimize environmental impacts but would pose significant health risks to the surrounding community by leaving the former gun range contaminated, and would not implement the City’s General Plan and Zoning for the site. Many of the “Interim Use” alternative land uses would have the same range of impacts as the proposed project, while the higher intensity recreational uses would most likely have greater impacts than the proposed project. The “Relocation of the Hanson Recycling Center” alternative would likely result in greater land use, noise, air, and aesthetic impacts to the Ocean View Mobile Home Park. An “Alternative Use” would not only likely generate greater traffic, air and noise impacts, but would also not be consistent with General Plan and zoning designations, and would create public health and safety concerns due to landfill gas, settlement, and site contamination hazards.

7.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

This discussion is based on the Initial Study/Notice of Preparation dated March 14, 2001, as contained in Appendix A to this EIR (circulated for public review between March 15 and April 13, 2001). The City of Huntington Beach prepared an Initial Study to determine the potentially significant effects of the proposed project and to assist in scoping the EIR issues. In the course of this evaluation, certain impacts of the project were found to be less than significant due to the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type. Although the California Environmental Quality Act (CEQA) Guidelines Section 15128 allows this discussion to incorporate an attached Initial Study by reference (see Appendix A, *INITIAL STUDY/NOTICE OF PREPARATION*), the following section provides a brief description of effects found not to be significant or less than significant, based on the Initial Study, NOP comments and subsequent more detailed analyses conducted through the EIR preparation process. Several issues indicated as “No Impact” or “Less than Significant Impact” in the Initial Study are nonetheless addressed in the EIR as a matter of clarification or convenience for the reader. In addition, certain Initial Study checklist items indicated as “Potentially Significant” were later found to be “Less than Significant” or “No Impact”, and are also addressed in the EIR as a matter of convenience for the reader.

7.1 EFFECTS FOUND NOT TO BE SIGNIFICANT

The following is a discussion of potential project impacts as identified in the Initial Study. Explanations are provided for each item.

1. LAND USE AND PLANNING. *Would the project:*

a) *Physically divide an established community?*

No Impact. The project site has been previously developed, and is surrounded by industrial, public, and open space uses. The project site is proposed to become an open space extension of the existing Huntington Central Park. Project implementation is not of a scope or nature such that it would physically divide an established community or disrupt the physical arrangement of the City. There are no anticipated significant long-term land use or planning impacts. However, the EIR addresses potential land use impacts associated with short-term remediation/construction operations, including lighting, noise, dust and traffic (Section 4.2).

b) *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

No Impact. The City of Huntington Beach General Plan land use designation for the proposed project site is Open Space-Park and is zoned OS-PR (Open Space-Parks and Recreation). Proposed uses for the project site will be consistent with the General Plan and Zoning Ordinance, as well as policies contained in the Huntington Central Park Master Plan. However, the EIR addresses relevant planning programs in Section 4.2 and throughout the EIR.

- c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?*

No Impact. The proposed project will not conflict with any habitat conservation plans or natural community conservation plans, as there are no such plans applicable to the project.

2. POPULATION AND HOUSING. *Would the project:*

- a) *Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

Less Than Significant Impact. The proposed project site is in an urban area, and was previously developed. All major infrastructure systems, including utilities, roads, and other public services are in place. The proposed project is not expected to induce local growth, either directly or indirectly. Therefore, impacts are not expected in the regard. Growth-inducing issues are discussed in Section 5.2 of the EIR.

- b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

No Impact. The proposed project will not displace people or homes, as the project area does not contain residential units. The proposed project site is within an area of primarily industrial, public, and open space uses. Ocean View Mobile Home Park is located approximately 0.25 miles to the southwest. No housing in this mobile home park will be displaced by the proposed project. The proposed project will not alter proposed land uses and complies with the City's General Plan. No impacts related to the displacement of the population are anticipated.

- c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

No Impact. Refer to Response 2b, above.

3. GEOLOGY AND SOILS. *Would the project:*

- a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

- 1) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

No Impact. Several earthquake faults traverse the City of Huntington Beach, the largest of which is the Newport-Inglewood Fault. This fault has been deemed capable of producing fault rupture due to co-seismic or primary seismic activity. However, the subject site is not located within an Alquist-Priolo Special Studies Zone, as the Newport-Inglewood fault zone is located one mile south of the subject site. Because no known or mapped active seismic faults traverse the subject site, no impacts would occur in this regard. Geologic constraints are addressed in Section 4.3, Geology and Soils.

- 2) *Landslides?*

No Impact. According to the City of Huntington Beach General Plan, potential landslide areas within the City are limited to the mesa bluffs region. The proposed project site is not in this region and is generally flat. Therefore, project implementation would not expose people or structures to potential substantial adverse effects involving landslides. Geologic constraints are addressed in Section 4.3, Geology and Soils.

- b) *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*

No Impact. No septic tanks or alternative wastewater disposal systems are proposed. Therefore, no impacts in this regard are expected.

4. HYDROLOGY AND WATER QUALITY. *Would the project:*

- a) *Violate any water quality standards or waste discharge requirements?*

Less Than Significant Impact. Impacts related to water quality would primarily result from erosion, siltation, and sedimentation occurring both during remediation of the gun range and grading for recreation uses. However, the project will be in compliance with all Santa Ana Regional Water Quality Control Board (SARWQCB) requirements and will obtain a National Pollution Discharge Elimination System (NPDES) Municipal Permit. Typical urban water quality pollutants usually result from motor vehicle operations, oil and grease residues, fertilizer/pesticide uses, and careless material storage and handling. Use of Best Management Practices (BMP's) will ensure that all on-site surface water will be directed to existing storm drains. In addition, a Water Quality Management Plan in accordance with NPDES standards will be prepared for the proposed project (see Appendix A, Attachment 4, Standard Conditions of Approval, Section C). With the incorporation of standard design measures, impacts are expected to be reduced to less than significant levels and eliminates the need for further analysis (see Appendix A, Attachment 5, Huntington Central Park

Master Plan EIR, Measure Water-4). In addition, impacts concerning erosion, siltation, and sedimentation are discussed in Section 4.3, *GEOLOGY AND SOILS*.

- b) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

Less Than Significant Impact. Project implementation would not result in the depletion of groundwater supplies or interference with groundwater recharge since the project does not involve the extraction of groundwater from the site. Groundwater wells supply 80% of the City of Huntington Beach's water. Although the project would not interfere with groundwater recharge, future park use would require water use consistent with the City's General Plan. The City will perform necessary studies to determine what measures will reduce the project's impacts to the City's water supply systems, including groundwater wells (see Appendix A, Attachment 5, Huntington Central Park Master Plan EIR, Measure Utilities-7). Impacts in this regard are anticipated to be less than significant.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?*

Less Than Significant Impact. The site has been previously developed and is void of existing drainage courses such as rivers or streams. Although the project may incorporate substantial amounts of impermeable surfaces for parking lots, paths, and internal roads, the project is not of the scope or nature to significantly alter the site's absorption rate. The project will be in compliance with all Santa Ana Regional Water Quality Control Board (SARWQCB) requirements and will obtain a National Pollution Discharge Elimination System (NPDES) Municipal Permit (see Appendix A, Attachment 4, Standard Conditions of Approval, Section C). Use of Best Management Practices (BMP's) will ensure that all on-site surface water will be directed to existing storm drains, in accordance with standard drainage facility design requirements (see Appendix A, Attachment 5, Huntington Central Park Master Plan EIR, Measure Utilities-8).

- d) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

Less Than Significant Impact. In addition, the proposed project is not located within a 100-year flood hazard area nor does the project include any housing. The proposed project is not located within the vicinity of a waterway retained by a levee or dam. Therefore, standard design measures are expected to reduce impacts to less than significant levels and eliminate the need for further environmental analysis.

- e) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

Less Than Significant Impact. Refer to Response 4d, above.

- f) *Otherwise substantially degrade water quality?*

Less Than Significant Impact. The project will be in compliance with all Santa Ana Regional Water Quality Control Board (SARWQCB) requirements and will obtain a National Pollution Discharge Elimination System (NPDES) Municipal Permit. Typical urban water quality pollutants usually result from motor vehicle operations, oil and grease residues, fertilizer/pesticide uses, and careless material storage and handling. Use of Best Management Practices (BMP's) will ensure that all on-site surface water will be directed to existing storm drains. In addition, a Water Quality Management Plan in accordance with NPDES standards will be prepared for the proposed project (see Appendix A, Attachment 4, Standard Conditions of Approval, Section C). With the incorporation of standard design measures, impacts are expected to be reduced to less than significant levels (see Appendix A, Attachment 5, Huntington Central Park Master Plan EIR, Measure Water-4).

- g) *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

No Impact. The proposed project does not include housing nor is it located within a 100-year flood hazard area. Therefore, no impacts are anticipated in this regard.

- h) *Place within a 100-year flood hazard area structures which would impede or redirect flood flows?*

No Impact. The proposed project site is not located within a 100-year flood hazard area, therefore no impacts of this nature will occur.

- i) *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*

No Impact. The proposed project is not located within the vicinity of a waterway retained by a levee or dam. Therefore, no impacts are anticipated in this regard.

- j) *Inundation by seiche, tsunami, or mudflow?*

No Impact. Previous evaluations put the tsunami potential for the City of Huntington Beach at very low. Of more concern are seiche waves caused by tsunamis captured and reflected within the enclosed area of an inner harbor, such as Huntington Harbour. The project site is not in the vicinity of a harbor. In addition, the site vicinity is void of land features capable of producing mudflow. Therefore, the potential for inundation by seiche, tsunami, or mudflow is sufficiently non-existent or remote so as not to be considered a significant impact.

5. **AIR QUALITY.** *Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:***

- a) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Less Than Significant Impact. The proposed project may result in temporary construction-related emissions and long term air quality effects. The implementation of the proposed project could possibly increase the number of recreational users within the City, thereby resulting in additional vehicular trips. However, the project will be consistent with the City's General Plan and impacts in this regard have been adequately analyzed in the General Plan EIR and Central Park Master EIR. These impacts are addressed in the EIR within the air analysis section (Section 4.4).

- b) *Conflict with or obstruct implementation of the applicable air quality plan?*

Less Than Significant Impact. Refer to Response 5a, above.

- c) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

Less Than Significant Impact. Refer to Response 5a, above.

6. TRANSPORTATION/TRAFFIC. *Would the project:*

- a) *Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?*

Less Than Significant Impact.

Short-term Traffic Impacts: The proposed project's traffic impacts can be separated into short-term impacts due to remedial and construction activities and long-term impacts from project operations. Short-term traffic impacts will result from increased trips of vehicles involved in the remediation and construction phases. However, in accordance with the City's Standard Conditions of Approval, a truck and construction vehicle routing plan will be prepared for the project to reduce any short-term traffic impacts to less than significant levels (refer to Appendix A, Attachment 4, Standard Conditions of Approval, Section F).

Long-term Traffic Impacts: The City's recently adopted "Transportation System Needs Analysis 2000-2010" (September 12, 2000, approved by City Council October 2, 2000) indicates that all nearby intersections of Gothard, Talbert, Goldenwest and Ellis are projected to operate at LOS D or better in 2010. The proposed recreational use for the former Gun Range site is not anticipated to generate significant traffic impacts, in consideration of its current General Plan designation and prior traffic levels associated with the former Gun Range when in operation. Estimated trip generation for the former gun

range facility is approximately 500 trips per day.¹ In comparison, estimated trip generation rates for future interim and long-term use of the project site is considerably lower, estimated at between 60 and 100 trips per day.² In addition, specific interim or long-term uses will require separate discretion and review and environmental analysis.

- b) *Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?*

Less Than Significant Impact. Refer to Response 6a, above.

- c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

No Impact. Although the City of Huntington Beach is included within the Airport Environs Land Use Plan (AELUP) of Orange County, the proposed project site is located more than 20,000 feet from the Armed Forces Reserve Center in the City of Los Alamitos. In addition, the height of future structures would not penetrate navigable airspace or otherwise impact air traffic patterns. No impacts are anticipated in this regard.

- d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Less Than Significant Impact. Implementation of the proposed project plan may result in an increase in vehicle trips, pedestrian activity, and bicycle use which could increase the potential for conflicts. However, implementation of the proposed Central Park Sports Complex (located adjacent to the project site) would include the widening of Gothard Street and the provision of sidewalks. These measures are expected to improve circulation and pedestrian safety within the area. Access to the subject site, currently provided via Gothard Street, is not proposed to change. Impacts are anticipated to be less than significant.

- e) *Result in inadequate emergency access?*

Less Than Significant Impact. The proposed project shall be in compliance with all City of Huntington Beach emergency response and/or emergency evacuation plans. The project site is currently accessible via an entrance located along Gothard Street. Incorporation of required evacuation plans and procedures shall be incorporated into site design and the project will comply with applicable design standards. In accordance with the City's Standard Conditions of Approval, fire access roads shall be provided in accordance with Fire Department codes (see Appendix A, Attachment 4, Standard Conditions of Approval, Section D). Impacts in this regard are expected to be less than significant. Emergency services are addressed in Section 4.6, Public Services and Utilities.

¹ Per letter received from City of Huntington Beach, "Trip Generation Estimate for Gun Range at Huntington Central Park", February 22, 2001.

² Per letter received from City of Huntington Beach, "Trip Generation for Hanson's Recycling and Dog Park Scenario", April 24, 2001.

f) *Result in inadequate parking capacity?*

No Impact. Implementation of the proposed project may create additional demand for parking. Development of the project site would be consistent with the City's General Plan and zoning ordinance. The City's Standard Conditions of Approval require that on-site parking be provided for all construction workers and equipment, thereby eliminating short-term construction impacts (see Appendix A, Attachment 4, Standard Conditions of Approval, Section G). Interim or long-term uses would require separate discretionary review, including consideration of parking adequacy. No impacts are expected in this regard.

g) *Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?*

No Impact. As stated above, the proposed project would incorporate the goals and policies of the City of Huntington Beach General Plan and Central Park Master Plan, and would not conflict with any other known policies. No impacts are expected in this regard.

7. BIOLOGICAL RESOURCES. *Would the project:*

a) *Have a substantial adverse effect, either directly or through mitigation measure obtain air district permit habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

No Impact. The project exists as a former gun range practice facility and is located within an urbanized area. The project contains only sporadic trees and patches of non-native grasses and shrubs. The proposed project will not have a significant impact on biological resources by endangering or threatening rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds), as none are known to exist on-site. No Federal or State listed threatened or endangered plant species are known to exist on or near the project site. Therefore, no impacts are anticipated in this regard.

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

No Impact. The project area has been previously developed and has not been identified in any local or regional plans, policies or regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service. No impacts to any riparian habitat or other sensitive natural communities would occur with the development of the project, as no riparian or sensitive habitat exists onsite.

c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

No Impact. The proposed project area has been developed in an urban area and is devoid of sensitive habitat, including wetlands.

- d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

No Impact. Project implementation would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, since the project has been previously developed. No known wildlife dispersal or migration corridors exist in the area, therefore no impacts in this regard are associated with the development of the project.

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

No Impact. The project site is developed and located within an urban setting. Project implementation would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

- f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

No Impact. The project area does not have an adopted Habitat Conservation Plan, Natural Community Plan or other habitat conservation plan and no other draft plan is in existence or proposed. Thus, the project would not result in impacts in this regard.

8. MINERAL RESOURCES. *Would the project:*

- a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

Less Than Significant Impact. No classified or designated mineral deposits of statewide or regional significance are known to occur within the project area. No significant impacts are anticipated in this regard.

- b) *Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

No Impact. The project site is located within a fully developed urban setting. The project site has not been delineated as an important mineral resource recovery site within the City's General Plan. No impacts are anticipated in this regard.

9. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*

- a) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

No Impact. No existing or proposed school facilities are located within a one-quarter mile radius of the project site. Therefore, no impacts in this regard are anticipated to occur.

- b) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

No Impact. Although the site is known to be contaminated with lead and other toxic substances, the former gun range is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, no impacts are anticipated in this regard. Public Health and Safety issues are addressed in Section 4.1.

- c) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

No Impact. Although the City of Huntington Beach is included within the Airport Environs Land Use Plan (AELUP) of Orange County, the proposed project site is located more than 20,000 feet from the Armed Forces Reserve Center in the City of Los Alamitos. The height of future structures would not penetrate navigable airspace or otherwise impact air traffic patterns. No impacts are anticipated in this regard.

- d) *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

No Impact. Refer to Response 9c, above.

- e) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

No Impact. The proposed project shall be in compliance with all City of Huntington Beach emergency response and/or emergency evacuation plans. The project site is currently accessible via an entrance located along Gothard Street. Incorporation of required evacuation plans and procedures shall be incorporated into site design and the project will be in compliance with the applicable design standards. Impacts in this regard are not expected to occur.

- f) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

No Impact. The project site is developed and located within a fully developed urban setting. Therefore, project implementation would not expose people or structures to a significant risk of loss, injury or death involving wildland fires.

10. NOISE. *Would the project result in:*

- a) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

No Impact. Although the City of Huntington Beach is included within the Airport Environs Land Use Plan (AELUP) of Orange County, the proposed project site is located more than 20,000 feet from the Armed Forces Reserve Center in the City of Los Alamitos. No impacts are anticipated in this regard.

- b) *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*

No Impact. Although the City of Huntington Beach is included within the Airport Environs Land Use Plan (AELUP) of Orange County, the proposed project site is not located in the vicinity of a private airstrip. No impacts are anticipated in this regard.

11. PUBLIC SERVICES.

- a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

- 1) *Fire protection?*

No Impact. The proposed project site is currently developed and has previously been served by the Huntington Beach Fire Department. The proposed project will comply with all City of Huntington Beach safety codes, emergency response and/or emergency evacuation plans, and the City's General Plan. Fire access roads shall be provided in compliance with City of Huntington Beach Fire Department standards (see Appendix A, Attachment 4, Standard Conditions of Approval, Section D of the *INITIAL STUDY/NOP*). Impacts in this regard have been adequately analyzed in the General Plan EIR and the Central Park Master EIR. However, these issues will be further analyzed in the EIR (Section 4.6).

- 2) *Police protection?*

Less Than Significant Impact. Development of the project may result in an overall increased demand for police protection services. Police patrols within the proposed recreation area will be necessary for crime prevention and safety measures. Police responses may be necessary during site remediation and construction. However, because this issue has been previously analyzed within the General Plan EIR and the Central Park

Master EIR, impacts are anticipated to be less than significant. These issues are analyzed as part of the public services and utilities section in the EIR (Section 4.6).

3) *Schools?*

No Impact. The project vicinity is served by the Ocean View School District and the Huntington Beach Union High School District. The project is not expected to create a need for new or increased school services or to directly impact enrollment figures. However, these issues are included in the EIR (Section 4.6).

4) *Parks?*

No Impact. The project site is proposed as a recreational land use, consistent with the site's General Plan and zoning designations. Implementation of the project will enhance the City's park system. No adverse impacts would occur in this regard. However, this issue will be further examined in the EIR within the public services and utilities analysis (Section 4.6).

5) *Other public facilities?*

No Impact. No other adverse impacts have been identified for public services, therefore, no impacts are anticipated in this regard.

12. UTILITIES AND SERVICE SYSTEMS. *Would the project:*

a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

Less Than Significant Impact. Although wastewater is expected to be generated from the potential park use, the amount of wastewater generated is not expected to exceed RWQCB requirements due to the scope and nature of the project. Although impacts are anticipated to be less than significant, these issues will be further examined within the EIR as part of the public services and utilities discussion (Section 4.6).

b) *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Less Than Significant Impact. Water consumption will primarily consist of irrigation of on-site vegetation, and may require the installation of water and wastewater facilities for restroom/concession buildings and drinking fountains. These will be provided as required by applicable City and County agencies. The City will perform necessary studies to determine what measures will reduce the project's impacts to the City's water supply systems (see Appendix A, Attachment 5, Huntington Central Park Master Plan EIR, Measure Utilities-7). In addition, project-related water demand is anticipated to be consistent with the General Plan EIR and the Central Park Master EIR and would not

otherwise result in a significant increase in demand. These issues are analyzed in the EIR (Section 4.6).

- c) *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Less Than Significant Impact. The proposed project will utilize existing storm water drainage facilities and is not expected to exceed the capacity of the drainage system or require new facilities to be constructed. Use of Best Management Practices (BMP's) will ensure that all on-site surface water will be directed to existing storm drains, in accordance with standard drainage facility design requirements (see Appendix A, Attachment 4, Huntington Central Park Master Plan EIR, Measure Utilities-8). Impacts in this regard are anticipated to be less than significant.

- d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

Less Than Significant Impact. Refer to Response 12b, above.

13. AESTHETICS. *Would the proposal:*

- a) *Have a substantial adverse effect on a scenic vista?*

No Impact. The project site has been previously developed and currently exists as a former gun range used by the general public and Huntington Beach Police Officers Association. The project area is generally flat and is surrounded by vacant land, light industrial, commercial, and residential uses. The proposed project would improve the aesthetic character of the site vicinity by replacing the existing dilapidated gun range structures with open space/park uses. All heating units, air conditioning units, plumbing lines, ductwork, and other unsightly equipment will be screened from view (see Appendix A, Attachment 4, Standard Conditions of Approval, Section H). Although no impacts are anticipated in this regard, these issues are addressed in the EIR (Section 4.7).

- b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

No Impact. Refer to Response 13a, above. The site does not contain any unique scenic resources.

- c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*

No Impact. Refer to Response 13a, above. The site has a highly degraded appearance which will be improved by the project.

14. CULTURAL RESOURCES. *Would the project:*

- a) *Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?*

No Impact. The proposed project site was operated by the County of Orange as a landfill until 1968 when it was converted into a gun range facility used by the Huntington Beach Police Officers Association and general public. The proposed project site currently exists as a former gun range facility and is in an urbanized area. No significant historical resources have been identified. Therefore, no impacts to cultural or historical resources are anticipated to occur.

- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?*

No Impact. The proposed project area has been previously disturbed, and subsurface material consists of debris and a thin layer of imported landfill cover soil. No known physical change would result that may have an impact on archaeological resources.

- c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

No Impact. The proposed project area has been previously developed, and subsurface material consists of debris and a thin layer of imported landfill cover soil. No unique paleontological resources or geological features exist on-site.

- d) *Disturb any human remains, including those interred outside of formal cemeteries?*

No Impact. The project has been previously developed, and subsurface material consists of debris and a thin layer of imported landfill cover soil. Due to the developed condition of the site, the disturbance of human remains is not anticipated.

15. RECREATION.

- a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

No Impact. The project is proposed for development as a recreational component of Huntington Central Park, consistent with existing General Plan and zoning designations. Overall, the project will positively contribute to the City's recreation system. No impacts are anticipated in this regard. See Section 4.6 of the EIR.

- b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Less Than Significant Impact. The construction of facilities on-site may include such facilities as restroom/concession structures, landscaping, parking lots, internal roads, and

lighting, some of which may have adverse physical effects on the environment. However, the overall benefits of the project will positively contribute to the City's recreation system. Impacts in this regard are anticipated to be less than significant.

- c) *Affect existing recreational opportunities?*

Less Than Significant Impact. Refer to Response 15a, above.

16. **AGRICULTURAL RESOURCES.** *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.*

Would the project:

- a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

No Impact. The project site is located within an urbanized setting and is occupied by a former gun range practice facility. Designated land uses within the project area do not include agricultural uses. Based upon the Farmland Mapping and Monitoring Program for the California Resource Agency, project components do not affect any agricultural resource area. Therefore, project implementation would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to a non-agricultural use.

- b) *Conflict with existing zoning for agricultural use, or a Williamson act contract?*

No Impact. Implementation of the project would not result in any conflicts with existing zoning for agricultural use or a Williamson Act Contract. The site is within an urbanized area and primarily consists of light industrial, commercial, and public uses. Therefore, no conflicts with existing agricultural zoning would occur.

- c) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?*

No Impact. As previously stated, the subject site is not used for agricultural production and agricultural operations do not occur within the project vicinity. Thus, implementation of the proposed project would not result in any changes to the environment that would result in the conversion of farmland to a non-agricultural use.

17. **MANDATORY FINDINGS OF SIGNIFICANCE.**

- a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

Less Than Significant Impact. The proposed project site has been previously developed in an urbanized area. No significant fish, wildlife, or plant communities exist on the proposed project site. In addition, significant cultural resources are not expected to occur on-site, as the project site is located on a former landfill. Impacts in this regard are expected to be less than significant.

8.0 ORGANIZATIONS AND PERSONS CONSULTED

Lead Agency/Applicant:

City of Huntington Beach
Department of Planning
2000 Main Street
P.O. Box 190
Huntington Beach, CA 92648

Mary Beth Broeren, Principal Planner, AICP
Ricky Ramos, Associate Planner

Environmental Consulting Team

RBF Consulting (EIR Consultant)
14725 Alton Parkway
Irvine, CA 92618-2069

Kevin Thomas, CEP, Environmental Services Manager (Project Manager)
Alan Ashimine, Environmental Analyst (Project Coordinator)
Bruce Grove, REA, Sr. Environmental Analyst
Eddie Torres, Environmental Analyst
Youji Yasui, Environmental Analyst

Hart Crowser (Remedial Work Plan)
One World Trade Center, Suite 2460
Long Beach, CA 90831-22460

Ravi Limaye, PE, REA, Senior Associate Engineer

D. Scott Magorien (Geotechnical Review)

D. Scott Magorien, CEG
17502 Cottonwood
Irvine, CA 92612

ORGANIZATIONS**Draft Environmental Impact Report****AND PERSONS CONSULTED****PUBLIC AGENCIES**

City of Huntington Beach
Department of Planning
2000 Main Street
Huntington Beach, CA 92648

Santa Ana Regional Water Quality
Control Board
3737 Main Street, Suite 500
Riverside, CA 92501
Ms. Ann Sturdivant

City of Huntington Beach Police Department
2000 Main Street
Huntington Beach, CA 92648
J.W. Arnold, Captain

Southern California Gas Company
12631 Monarch St.
Garden Grove, CA 92841
Mr. Kevin Stonesifer

City of Huntington Beach Library Services
Department
7111 Talbert Ave.
Huntington Beach, CA 92648
Mr. Ron Hayden

Southern California Edison
7333 Bolsa Ave.
Westminster, CA 92683
Ms. Spring Bowles

City of Huntington Beach GIS Division
2000 Main Street
Huntington Beach, CA 92648

Time Warner Communications
7441 Chapman Ave.
Garden Grove, CA 92840
Mr. Bill Jankowski

City of Huntington Beach Public Works
Department
2000 Main Street
Huntington Beach, CA 92648
Mr. Todd Broussard

Verizon
7352 Slater Ave.
Huntington Beach, CA 92647
Ms. Janice Davis

Huntington Beach Fire Department
2000 Main Street
Huntington Beach, CA 92648
Mr. Ward Kinsman

Orange County Health Care Agency
P.O. Box 355
Santa Ana, CA 92702
Mr. Steve Kim

Rainbow Disposal Company
P.O. Box 1026
Huntington Beach, CA 92647
Ms. Sandra Jacobs

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www.aqmd.gov/ceqa/hdbk.html (updated guidance documents)